SITE ASSESSMENT REPORT FOR PILSEN AREA SOIL SITE: RAILROAD/ALLEY CHICAGO, COOK COUNTY, ILLINOIS

Revision 3

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Emergency Response Branch Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507

Prepared by:

WESTON SOLUTIONS, INC.

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LIST OF ABBREVIATIONS AND ACRONYMS

μm	Micrometer
$\mu g/m^3$	Microgram per cubic meter
μg/L	Milligrams per liter
%	Percent
ANOVA	Analysis of variance
ARD	Air and Radiation Division
bgs	Below ground surface
BNSF	Burlington Northern Santa Fe Railway
Cabeno	Cabeno Environmental Field Services, LLC
CFR	Code of Federal Regulations
Crawford Station	Midwest Generation's Crawford Station coal-fired power plant
DOJ	Department of Justice
FIELDS	Field Environmental Decision Support
Fisk Station	Midwest Generation Fisk Station coal-fired power plant
°F	Degrees Fahrenheit
ft	Feet, foot
ft^2	Square feet, square foot
g/s	Grams per second
GLM	General Linear Model
H. Kramer	H. Kramer and Company
HQ	Hazard quotient
IEPA	Illinois Environmental Protection Agency
Juarez	Benito Juarez Community Academy
LA-ICP-MS	Laser ablation-inductively coupled plasma-mass spectrometry
mg/kg	Milligram per kilogram
mg/L	Milligrams per liter
MRG	Modeling Resource Group
NAAQS	National Ambient Air Quality Standard
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEIC	National Enforcement Investigations Center
NFR	No Further Remediation
NOAA	National Oceanic and Atmospheric Administration
OSC	On-Scene Coordinator
Perez	Manuel Perez Jr. Elementary School
PERRO	Pilsen Environmental Rights & Reform Organization
Pilsen	Lower West Side
PPE	Personal protective equipment
REE	Rare earth elements
RCRA	Resource Conservation and Recovery Act
RML	Removal Management Level
SAU	Site Assessment Unit
SEM/EDS	Scanning electron microscopy with energy dispersive spectrometry
SOP	Standard Operating Procedure

LIST OF ABBREVIATIONS AND ACRONYMS (CONTINUED)

SRP	Site Remediation Program
START	Superfund Technical Assessment and Response Team
STAT	STAT Analysis Corporation
TCLP	Toxicity Characteristic Leaching Procedure
TDD	Technical Direction Document
TRI	Toxic Release Inventory
TSP	Total suspended particulate
USCS	Unified Soil Classification System
USGS	United States Geological Survey
WESTON	Weston Solutions, Inc.
XRF	X-ray fluorescence
yd ³	Cubic yards

1. INTRODUCTION

The United States Environmental Protection Agency tasked the Weston Solutions, Inc. (WESTON[®]), Superfund Technical Assessment and Response Team (START) to assist EPA On-Scene Coordinator (OSC) Ramon Mendoza in performing a site assessment at an alley (owned by the City of Chicago) and a railroad spur (owned by Burlington Northern Santa Fe Railway [BNSF]) located adjacent to the H. Kramer and Company (H. Kramer) facility in the Pilsen neighborhood of Chicago, Cook County, IL (the Site, **Figure 1-1**). The objective of the site assessment was to determine the impact of present and historical industrial sources of heavy metal air emissions on Site soil. For an assessment of the impact of present and historical industrial sources in the Pilsen community, see "Site Assessment Report for Pilsen Soil Site: Downwind Residential Area" (WESTON START, March, 2014).

Under Technical Direction Document (TDD) No. S05-0001-1211-002, EPA requested that WESTON START document and photograph current Site conditions, conduct X-ray fluorescence (XRF) screening, collect and analyze soil samples, and evaluate the potential for imminent and substantial threats to the public health, welfare, or the environment posed by Site-related conditions. In December 2012, May 2013, and August 2013, WESTON START conducted three site assessment field sampling events.

This site assessment report is organized into the following sections:

- Introduction Provides a brief description of the scope of site assessment activities.
- **Site Background** Details the Site description and summarizes previous environmental investigations in the vicinity of the Site.
- Site Assessment Activities Discusses methods and procedures used during the site assessment.
- Analytical Results Discusses analytical results for samples collected during the site assessment.
- Soil Lithology Summarizes the soil characteristics at the Site.

- Threats to Human Health and the Environment Identifies Site conditions that may warrant a removal action under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).
- Summary and Conclusions Summarizes the site assessment conclusions.
- **References** Provides a list of references used to prepare this site assessment report.

Figures and tables are presented after the conclusions section. This site assessment report contains four appendices. **Appendix A** provides photographic documentation of Site conditions and activities at the time of the site assessment. **Appendix B** provides soil boring logs. **Appendix C** provides the laboratory analytical and data validation reports for samples collected during the site assessment. **Appendix D** provides supplemental soil data analysis by EPA's Field Environmental Decision Support (FIELDS) group.

2. SITE BACKGROUND

2.1 SITE DESCRIPTION

The Site consists of a railroad spur owned by BNSF and an alley owned by the City of Chicago. **Figure 2-1** presents the Site features. The Site is located in the Lower West Side (Pilsen) area of the City of Chicago. The alley is approximately 460 feet (ft) long and 18 ft wide (approximately 8,280 square feet [ft²] in area) and is roughly paved with asphalt over 25% of its length from the east side. The remaining 75% of the alley is bare soil. The alley connects South Loomis Street and South Throop Street, south of West 21st Street and north of West Cermak Road. The alley is bordered to the north by H. Kramer, the east by South Throop Street, to the south by commercial and industrial businesses, and to the west by the railroad spur then South Loomis Street. According to a historical Sanborn fire insurance map, the alley existed since at least 1914.

The section of the railroad spur investigated in this site assessment is approximately 19,600 ft². The railroad spur consists of an unused rail track and bare soil. The western portion of the railroad spur is located in the northeast region of a property occupied by the Benito Juarez Community Academy (Juarez), located at 1450-1510 West Cermak Road. The railroad spur curves to the south, crosses South Loomis Street, and extends along the west boundary of H.

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Kramer, a 6.5-acre active brass and bronze smelter located at 1345 West 21st Street. The eastern portion of the railroad spur is bordered by a tire service company to the west (Tire Grading Company, 1358 West Cermak Road), a metal processing company to the east (Wheeling Metal Processing Company, 1338 West Cermak Road), and West Cermak Road to the south. According to a historical Sanborn fire insurance map, the railroad spur existed since at least 1914.

Two schools are located within a ¹/₄-mile-radius of the Site: Juarez and the Manuel Perez Jr. Elementary School (Perez). Two City of Chicago parks are located within a ¹/₂-mile-radius of the Site, Dvorak Park and Throop Park. In 2010, approximately 40,983 people lived within 1 mile of the Site (EPA 2014). The Chicago Sanitary and Ship Canal is located approximately 0.45 miles to the south. According to National Oceanic and Atmospheric Administration (NOAA) meteorological data collected from 1928 to 2013, the predominant wind direction in the Chicago, Illinois area is from the southwest. **Figure 2-2** presents a projected wind direction swath superimposed over the southwest region of the Site.

Among the suspected present and historical industrial sources of lead air emissions in the Site area are H. Kramer and the Midwest Generation Fisk Station coal-fired power plant (Fisk Station. H. Kramer is a corporation that owns and operates a secondary nonferrous metals facility manufacturing primarily brass and bronze ingots, where a portion of the facility's production capacity is devoted to lead-containing metal alloys. In general, the secondary production of lead begins with the recovery of old scrap from worn-out, damaged, or obsolete products and new scrap that is made of product wastes and smelter-refinery drosses, residues, and slags. Secondary lead processing results in the generation of air emissions and solid-phase wastes. Reverberatory and blast furnaces used in smelting account for the vast majority of the total lead emissions. Other emissions from secondary smelting include oxides of sulfur and nitrogen, antimony, arsenic, copper, and tin. The solid-phase wastes generated by secondary processing include emission control dust and slag. Slag produced during lead processing is composed of iron, calcium, and silicon oxides, aluminum, and potentially several other metals in smaller amounts including antimony, arsenic, beryllium, cadmium, chromium, cobalt, copper, lead, manganese,

mercury, molybdenum, silver, and zinc. For a detailed description of secondary lead processing, see EPA's *Profile of the Nonferrous Metals Industry* (EPA 1995). H. Kramer is listed in the EPA Toxic Release Inventory (TRI) System. TRI facilities are legally required to report to EPA and EPA has tracked both fugitive and stack emissions from H. Kramer from 1987 to 2013. Fugitive emissions are emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening, and often occur during leaks from pressurized equipment or during material transfer. From 1987, approximately 54,366 pounds of lead, 832,567 pounds of zinc, and 6,782 pounds of copper have been released via fugitive and stack emissions (EPA 2013a). The Fisk Station is a 66-acre former coal-fired power plant located at 1111 West Cermak Road. The plant ceased electricity generation operations in August 2012. Fisk Station is also listed in the EPA TRI System (EPA, 2013b). From 1998 to 2012, approximately 1,197 pounds of lead, 236 pounds of zinc, 373 pounds of copper, and 805 pounds of mercury have been released via fugitive and stack emissions.

2.2 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

This section presents summaries of previous environmental investigations conducted in the vicinity of the Site related to the Pilsen neighborhood, H. Kramer, and Fisk Station.

2.2.1 PERRO Surface Soil Investigation

In March 2005, the Pilsen Environmental Rights & Reform Organization (PERRO) collected 12 surface soil samples in the Site Area around the vicinity of H. Kramer (Subra Company 2005). Lead was detected in soil samples collected from eight locations above the 2012 EPA Removal Management Level (RML) with a hazard quotient (HQ) of 3 for residential soil of 400 milligram per kilogram (mg/kg). Lead concentrations ranged from 440 to 37,000 mg/kg. Copper was detected in one soil sample above the 2012 EPA RML HQ 3 for residential soil of 9,300 mg/kg, with a concentration of 14,000 mg/kg. Zinc was detected in one soil sample above the 2012 EPA RML HQ 3 for residential soil of 23,000 mg/kg, with a concentration of 100,000 mg/kg.

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2.2.2 H. Kramer Enrollment in the IEPA SRP

In June 2005, the Illinois Environmental Protection Agency (IEPA) Site Assessment Unit (SAU) identified heavy metal contamination, particularly lead, on the H. Kramer property and in the nearby vicinity. Lead concentrations in 15 of the 17 samples collected by the SAU exceeded 1,000 mg/kg. In September 2005, H. Kramer entered the IEPA Site Remediation Program (SRP). Remedial action was implemented via in situ treatment or excavation in areas where lead or cadmium exceeded the Toxicity Characteristic Leaching Procedure (TCLP) concentrations set forth in Title 40 of the *Code of Federal Regulation* (CFR) Part 261, Subpart C, 261.24 (b), thereby representing materials that meet the definition of hazardous waste by virtue of the characteristic of toxicity.

On September 7, 2005, approximately 5 to 7 cubic yards (yd³) of soil were removed from an area measuring 22 ft by 10 ft, and approximately 0.75 ft deep. The excavation area was then backfilled with clean, imported gravel. Additionally, a small amount of soil located on top of the sidewalk near the northeastern corner of the H. Kramer property was removed.

In the fall of 2011, in situ stabilization of shallow soils was conducted where TCLP lead concentrations exceeded levels set forth in 40 CFR Part 261, Subpart C, 261.24 (b). A total of 2,769 yd³ of impacted soils were stabilized in treatment cells with a mixture of kiln dust and phosphorus. Confirmation samples of the treated soils were collected at a rate of one sample per 250 yd^3 . All samples confirmed that stabilization was achieved.

In December 2011 and March 2012, H. Kramer submitted to IEPA a Remedial Action Completion Report and an Addendum to the Remedial Action Completion Report, respectively. On March 29, 2012, IEPA granted H. Kramer a No Further Remediation (NFR) Letter, signifying a release from further responsibilities pursuant to Section 58.10 of the Illinois Environmental Protection Act (415 ILCS 5/1 et seq.). Requirements outlined in the NFR included, but were not limited to, the following: (1) the remediation site should be restricted to industrial/commercial land use; (2) a safety plan should be developed to address possible worker exposure in the event that any future excavation and construction activities may occur within the contaminated soil that exists beneath the engineered barriers; (3) an asphalt barrier must remain over the contaminated soils, and must be properly maintained to inhibit inhalation and ingestion of the contaminated media; (4) a concrete cap barrier must remain over the contaminated soils, and must be properly maintained as an engineered barrier to inhibit inhalation and ingestion of the contaminated soil.

2.2.3 Pilsen IEPA Air Monitoring Study

In January 2010, IEPA placed an air monitoring station on the roof of Perez Elementary School to sample ambient air concentrations of lead in the area. Air samples at the Perez monitor were collected once every six days. In 2010, lead was detected in 11 of the approximately 60 samples at concentrations above the National Ambient Air Quality Standard (NAAQS) of 0.15 microgram per cubic meter (μ g/m³), averaged over three months. IEPA installed a second air monitoring station at Juarez to the west of H. Kramer and Perez. According to IEPA, results from the second air monitoring station indicated that H. Kramer was the primary contributor to the elevated ambient air lead levels in the area. As a result, IEPA requested that the Illinois Attorney General initiate legal action against H. Kramer relative to its contribution to a violation of the lead NAAQS. EPA addressed this issue in a 2011 enforcement action (see Section 2.2.6).

2.2.4 NEIC Pilsen Investigations

In March 2011, EPA Region 5 requested EPA's National Enforcement Investigations Center (NEIC) to examine particulate matter from H. Kramer and Fisk Station and total suspended particulate (TSP) matter collected in ambient air on glass fiber filters from area air monitoring stations to determine if material from either facility was present on the TSP filters. As described in **Section 2.2.3**, in January 2010, IEPA began operating a source-oriented TSP air monitoring station at Perez. This station is in the predominantly downwind direction of H. Kramer. In March 2011, a second TSP air monitoring site was established at Juarez.

On August 21, 2011, NEIC submitted a report to EPA Region 5 entitled "Characterization of Lead-Bearing Particulate Matter," presenting analytical results of filters containing the highest and lowest concentrations of lead collected at the Perez air monitoring site from January 2010 to

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January 2011, as well as baghouse dust samples collected at H. Kramer (EPA NEIC 2011). Analytical results indicated cadmium, copper, tin, and zinc were co-contaminants of the leadbearing particulate matter collected on the TSP filters. These co-contaminants were metals used in alloys produced at H. Kramer and were also found in similar proportions in H. Kramer baghouse dust samples. Lead-bearing, micrometer (μ m) sized (1–10 μ m) aggregates of zincoxide crystallites were common in ambient air in the Pilsen neighborhood on at least six days in 2010, and were similar to the predominant baghouse dust particles from H. Kramer. The report concluded that H. Kramer's furnaces were likely the primary source of lead-bearing airborne particulate matter in the Pilsen neighborhood based on the location of its facility, wind direction, and analytical results of TSP filters and baghouse dust from its facility. However, the Fisk Station could not be excluded as a possible contributing source of lead contamination at the Perez air monitoring site because particulate matter similar to coal fly ash was observed on the filters collected from Perez. For more information, refer to EPA NEIC (2011).

On August 24, 2012, NEIC submitted a second report to EPA Region 5 entitled "Additional Characterization of Lead-Bearing Particulate Matter," presenting additional analytical results of lead-bearing particulate matter on TSP filters from the Juarez and Perez air monitoring stations and in coal and fly ash collected from the Fisk Station and Midwest Generation's Crawford Station coal-fired power plant (Crawford Station), in addition to any contribution from H. Kramer. In all, nine TSP filter samples collected at the Juarez air monitoring station and 32 TSP filter samples collected at the Perez air monitoring station were selected for analysis, along with baghouse dust samples from H. Kramer and coal and fly ash samples from both the Fisk and Crawford Stations. Relative elemental abundances were determined by laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS). Coal and fly ash from Crawford and TSP filters collected at Perez and Juarez air monitoring stations were analyzed by scanning electron microscopy with energy dispersive spectrometry (SEM/EDS) to characterize individual particles for elemental composition, morphology, and size. Analytical results of TSP filters were compared against each other and with facility sample results. The three key main findings from these analyses are summarized as follows:

- H. Kramer was indicated as the major contributor of airborne lead-bearing particulate matter in the Pilsen neighborhood, both during and outside the NAAQS exceedance period of October 2010 to February 2011.
- 2) Spherical Calcium-Aluminum-Silicon-oxide particles and correlations of rare earth elements (REE) on TSP filters collected at Perez and Juarez were consistent with coal fly ash. Fisk Station was the coal-generated power plant located closest to the air monitoring sites. The next closest power plant, Crawford, was approximately seven times farther away. No other likely sources of spherical Calcium-Aluminum-Silicon-oxide particles were identified in the surrounding area. Furthermore, spherical Ca-Al-Si-oxide particles were the most common on TSP filters collected during the 24-hour collection periods when the predominant wind direction put Fisk Station upwind of the collection site.
- Fisk Station contributed insignificant quantities of lead-bearing particulate matter relative to H. Kramer during (and outside) the NAAQS exceedance period of October 2010 to February 2011.

For details supporting these conclusions, refer to EPA NEIC (2012).

2.2.5 H. Kramer 2011 Litigation and Emission Control Implementation

In 2011, the United States brought three claims against H. Kramer. First, the United States alleged that H. Kramer violated the Illinois State Implementation Plan by causing or allowing the emission of lead into the air to cause air pollution and/or to prevent the attainment or maintenance of the revised NAAQS for lead. Second, the United States alleged that H. Kramer failed to maintain and operate the rotary furnaces at the facility in a manner consistent with good air pollution control practice, as required by the Standards of Performance for New Stationary Sources. Third, the United States alleged that H. Kramer failed to operate and maintain all furnace melting operations in a manner consistent with good air pollution control practices as required by the National Emissions Standards for Hazardous Air Pollutants.

Negotiations between EPA, IEPA, the Attorney General's Office, Department of Justice (DOJ),

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and H. Kramer resulted in an Agreed Preliminary Injunction Order being filed in state court on September 2, 2011. Pursuant to the order, H. Kramer made significant repairs to the facility, including pollution control upgrades, cleanup, and paving of the facility's yard, and reduction in the production of two lead alloys. A final Consent Decree was filed in federal court and executed on March 28, 2013. More specifically, the decree required installation and operation of two new baghouses to better control emissions from the rotary furnaces located in the south foundry building. A construction permit was issued in January 2012 for H. Kramer to install the two new baghouses.

2.2.6 City of Chicago Metal Concentrations in Ambient Surface Soils Study

In June 2001 and January 2002, the U.S. Geological Survey (USGS), in cooperation with the City of Chicago, Department of Environment, collected soil samples from 57 areas near residential, commercial, and industrial land use areas to assess the concentration of metals and polynuclear aromatic hydrocarbons in ambient surface soils within the City of Chicago (USGS 2003). Ambient soils are defined as those soils whose chemical composition is affected by ubiquitous natural and anthropogenic processes rather than the site-specific disposal of waste materials. Soil samples were collected from the upper 6 inches of the soil horizon (from 0 to 6 inches in an undisturbed soil horizon or from the upper 6 inches of a soil horizon where it may be covered by gravel) using a dedicated stainless steel spoon or trowel.

The mean concentration of arsenic, mercury, calcium, magnesium, phosphorus, copper, molybdenum, zinc, and selenium was from two to six times higher in Chicago soil than soils in agricultural areas within 500 kilometers of Chicago, and concentrations of lead were approximately 20 times higher than in soil from the surrounding area. Inter-element correlation coefficients for the inorganic analytes were calculated to provide additional insight into the sources of the inorganic constituents. The sets of elements showing strong mutual correlations can indicate causative factors for the observed concentrations and distribution of these elements. Although the bulk of the compositional trends in Chicago soils are explainable by varying proportions of dolomite and shale, which likely are soil parent material, the elevated (in comparison to surrounding agricultural soils) concentrations of arsenic, copper, lead, mercury,

molybdenum, nickel, phosphorus, selenium, and zinc indicate a potential anthropogenic source of these elements. Lead (concentration factor of 20.4), zinc (7.4), and mercury (4.5) are enriched relative to background soils and all seem likely to indicate substantial and widespread anthropogenic modifications to the trace-element character of the soil. Sampling results for copper, lead, zinc, and mercury are presented as follows:

Constituent	No. of Samples Collected	No. of Detections	Arithmetic Mean (mk/kg)	Standard Deviation (mk/kg)	Range of Detected Concentrations (mg/kg)
Copper	57	57	150.5	373.7	9-2,780
Lead	57	57	395	494.2	13-1,910
Zinc	57	57	396.6	410.8	79-1,690
Mercury	57	56	0.6	1.9	<0.02-13.1

The high correlation between lead and zinc ($R^2 = 0.91$) suggests that the two elements have been added to soils largely from the same material or process rather than as independently distributed constituents (USGS 2003). Mercury shows low correlation with all other constituents, including organic carbon ($R^2 = 0.135$). In many natural settings, mercury and organic carbon are highly correlated so the lack of correlation in Chicago soil suggests an anthropogenic addition largely independent of natural processes.

3. SITE ASSESSMENT ACTIVITIES

In December 2012, May 2013, and August 2013, EPA and WESTON START conducted a site assessment to determine the impact of present and historical industrial sources of heavy metal air emissions at the locations of the Site.

To fulfill these objectives, the following site assessment activities were conducted:

- December 19, 2012: Alley field sampling event.
- May 6, 2013: Railroad spur field sampling event.
- August 12-15, 2013: Little Italy reference area residential property field sampling event.

All sampling activities were conducted in Level D personal protective equipment (PPE) in accordance with the approved site-specific health and safety plan. Fresh sampling gloves were donned before sampling activities began at each new location, and for each sample to avoid cross-contamination. Non-disposable equipment that could potentially cross-contaminate samples (e.g., Geoprobe[®] cutting shoe) was decontaminated between each sampling location using an alconox wash and a potable water rinse. Specific sampling activities are discussed in the following sections. Figures and tables are presented after the References section (Section 8). **Appendix A** provides photographic documentation of Site conditions and activities at the time of the site assessment, and **Appendix B** provides soil boring logs.

3.1 ALLEY SITE ASSESSMENT ACTIVITES

On December 19, 2012, EPA and WESTON START conducted a field sampling event at the alley. The December 19, 2012, field sampling event was conducted in accordance with the "Field Sampling Plan for the Pilsen Area Soil Site Assessment," dated December 17, 2012. It was also conducted in overall accordance with the Quality Assurance Project Plan for the Region 5 START III Contract, dated June 2006. EPA received a permit from the City of Chicago for soil boring activities between December 18 and 20, 2012. The alley was divided into 10 sections of roughly equal surface area. Within each section, WESTON START subcontractor Cabeno Environmental Field Services, LLC (Cabeno), of Joliet, IL, used a Geoprobe[®] drill rig to advance two soil borings to a depth up to 4 ft below ground surface (bgs). Twenty soil borings were conducted (AY-01 through AY-20; **Figure 3-1**). The soil from each 4-ft core was inspected and observations were recorded in a soil boring log in accordance with the Unified Soil Classification System (USCS) (**Appendix B**). Documentation was recorded regarding any fill materials, odors, discoloration, or staining suggesting potential contamination.

The 0- to 6-, 6- to 12-, 12- to 24-, 24- to 36-, and 36- to 48-inch bgs intervals from each soil boring were placed into disposable polyethylene bags, homogenized, and screened by EPA FIELDS for total metals using a handheld Innov-X Delta XRF analyzer. WESTON START collected a total of 23 samples (21 investigative and two field duplicates) as follows:

• Ten composite samples were collected from the 10 sections of the alley, one composite from each section. Composite soil samples consisted of an aliquot of soil from both borings in a section, taken from the depth interval showing the highest total lead XRF screening concentration

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- One additional composite sample was collected at location AY-03, consisting of soil aliquots collected from 0 to 6 inches bgs from location AY-03 and three step-out locations 5 ft to the west, south, and east of AY-03 (AY-03W, AY-03S, and AY-03E).
- Ten grab soil samples were also collected from the alley. One grab soil sample was collected from one of the two borings within each of the 10 sections at the depth interval showing the highest total lead XRF screening concentration.

Soil samples were submitted under chain-of-custody to STAT Analysis Corporation in Chicago,

IL, for at least one of the following analyses:

- Total Resource Conservation and Recovery Act (RCRA) metals (silver, arsenic, barium, cadmium, chromium, mercury, lead, and selenium) plus antimony, copper, tin, and zinc.
- Total lead
 - Coarse-grained fraction (grain size > $250 \mu m$).
 - Fine-grained fraction (grain size $< 250 \ \mu m$).
- Bioavailable lead.
- TCLP RCRA metals.
- pH.
- Moisture content.

Table 3-1 presents a summary of the sampling, including the sampling identification, sampling location, and analytical parameters.

3.2 RAILROAD SPUR SITE ASSESSMENT ACTIVITES

EPA tasked WESTON START with conducting additional site assessment activities based on analytical results from the alley soil samples. On May 62013, EPA and WESTON START conducted a field sampling event at the railroad spur. The May 62013, field sampling event was conducted in accordance with the document entitled "Field Sampling Plan for the Pilsen Area Soil Site Assessment, Revision 2," dated April 30, 2013. It was also conducted in overall accordance with the Quality Assurance Project Plan for the Region 5 START III Contract, dated June 2006. EPA FIELDS used a Geoprobe[®] drill rig to advance 16 soil borings to 2 ft bgs (RR-01 through RR-16; **Figure 3-1**). The soil from each 2-ft core was inspected and observations

were recorded in a soil boring log in accordance with the USCS (**Appendix B**). Documentation was recorded noting any fill materials, odors, discoloration, or staining suggesting potential contamination. The 0- to 6-, 6- to 12-, and 12- to 24-inch bgs intervals of each soil boring were placed into disposable polyethylene bags, homogenized, and screened by WESTON START for total metals using EPA's Innov-X Alpha Series XRF analyzer.

Thirteen composite soil samples (12 investigative and one field duplicate) were collected from 13 locations on the railroad spur. Composite samples consisted of aliquots collected from two or three adjacent borings, from either 0 to 6 or 6 to 24 inches bgs. Composite samples consisted of aliquots collected from the same depth interval. No samples were collected from locations RR-03, RR-05, or RR-09 as a result of relatively lower XRF lead screening values. Soil samples were submitted under chain-of-custody to STAT Analysis Corporation in Chicago, IL, for at least one of the following analyses:

- Select total metals (antimony, copper, cadmium, chromium, mercury, lead, tin, and zinc).
- Total lead, fine-grained fraction (grain size $< 250 \ \mu m$).
- Bioavailable lead.
- pH.

3.3 LITTLE ITALY REFERENCE AREA SITE ASSESSMENT ACTIVITES

In August 2013, EPA and WESTON START conducted a field sampling event in the Little Italy residential neighborhood (Little Italy reference area). The August 2013 field sampling event was conducted in accordance with the document entitled "Field Sampling Plan for the Pilsen Area Soil Site Assessment, Revision 2, Amendment 1," dated July 5, 2013, and with EPA's "Superfund Lead-Contaminated Residential Sites Handbook" (EPA 2003). It was also conducted in overall accordance with the Quality Assurance Project Plan for the Region 5 START III Contract, dated June 2006. Data collected from this area served as a reference of soil suspected to be less impacted by industrial sources, such as H. Kramer and Fisk Station due to an increased distance from these sources. The Little Italy reference area is approximately 110 acres and located approximately 1.2 miles north of the Site. The Little Italy reference area is bound to the north by West Lexington Street, to the east by South Ada Street, to the south by West Taylor

Street, and to the west by South Laflin Street (Figure 1-1).

WESTON START advanced soil borings to 24-inches bgs using a 2-, 3-, or 4-inch stainless steel soil auger. Two to five-point composite samples were collected from 0- to 2-, 0- to 6-, 6- to 12-, 12- to 18-, and 18- to 24-inch bgs depth intervals from either the front yard or backyard of residents in the Little Italy reference area. Composite samples were placed into disposable polyethylene bags and mixed. Samples were not collected from gardens, drip zone areas, or areas near painted surfaces. WESTON START described each soil sampling interval in accordance with the USCS. Soil descriptions were recorded in the Site logbook to create a detailed record of the lithology and potential contaminant characteristics of each sampling location. Documentation was recorded noting any fill materials, odors, discoloration, or staining suggesting potential contamination. The 0- to 2-, 0- to 6-, 6- to 12-, 12- to 18-, and 18- to 24-inch bgs intervals of each soil boring were then screened by the by WESTON START for total metals using EPA's Innov-X Alpha Series XRF analyzer. Sampled intervals were transferred directly into laboratory-provided glass sample jars and placed on ice. Any unused soil was returned to the location from which it was collected. All boring locations in residential locations were filled to the original grade with commercially available fill dirt, and then seeded with grass seed.

EPA and WESTON START collected 16 soil samples (14 investigative and two field duplicates) from 11 residential properties located within the Little Italy reference area (**Table 3-1**, **Figure 3-2**). The 0- to 6-inch bgs composite sample was submitted for analytical laboratory analysis at all locations. If XRF screening showed the 0- to 2-inch bgs composite sample was an order of magnitude different in lead concentration from the 0- to 6-inch bgs composite sample, both composites were submitted for analytical laboratory analysis. At approximately 30% of the locations, a composite sample was collected from below 6 inches bgs and submitted for analytical laboratory analysis. Submitted composite samples collected from below 6 inches bgs had a range (low, medium, and high) of XRF lead concentrations.

Soil samples were submitted under chain-of-custody to STAT Analysis Corporation in Chicago, IL, for the following analyses:

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- Select total metals (antimony, copper, cadmium, chromium, mercury, lead, tin, and zinc).
- Total lead, fine-grained fraction (grain size < 250 µm).

4. ANALYTICAL RESULTS

4.1 ALLEY SAMPLING RESULTS

TCLP Metals (Toxicity)

TCLP metal analytical results were compared to the screening criteria in 40 CFR, Part 261, Subpart C 261.24 (b) to determine if the samples were considered hazardous. TCLP metals results from the four soil samples collected from the alley location are presented on **Table 4-1** and **Figures 4-1** and **4-2**, and are summarized as follows:

• Soil samples PA-AC03(0-6)-121912, PA-AC04(0-6)-121912, and PA-AY05(6-12)-121912 contained TCLP lead at concentrations of 12, 12, and 9.6 milligrams per liter (mg/L), respectively. These TCLP lead concentrations exceed the TCLP lead regulatory limit of 5.0 mg/L. According to 40 CFR Part 261, Subpart C, 261.24 (b), these samples represent materials that meet the definition of hazardous waste by virtue of the characteristic of toxicity.

Total Metals

Total metal analytical results were compared to the EPA RMLs for residential soil, HQ 3. Total metal results from the 23 soil samples collected from the alley location are presented on **Table 4- 1**, in **Figures 4-1** and **4-2** (for contaminants of concern), and are summarized as follows:

- Antimony was detected in soil samples PA-AC03(0-6)-121912, PA-AC06(0-6)-121912, PA-AY04(6-12)-121912, PA-AY05(6-12)-121912, PA-AY09(12-24)-121912, and PA-AY13(12-24)-121912 at estimated concentrations ranging from 110 to 640 mg/kg. Antimony was detected in soil sample PA-AY07(12-24)-121912 at a concentration of 1,200 mg/kg. These concentrations exceed the RML for antimony of 94 mg/kg.
- Arsenic was detected in soil sample PA-AY05(6-12)-121912 at an estimated concentrations of 73 mg/kg, respectively. Arsenic was detected in PA-AY04(6-12)-121912 and PA-AY07(12-24)-121912 at concentrations ranging of 86 and 93 mg/kg, respectively. These concentrations exceed the RML for arsenic of 61mg/kg.
- Copper was detected in soil samples PA-AY05(6-12)-121912, PA-AY07(12-24)-121912, PA-AY18(6-12)-121912, and PA-AY19(12-24)-121912 at concentrations

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ranging from 12,000 to 33,000 mg/kg, exceeding the RML for copper of 9,400 mg/kg.

- Lead was detected in 21 of 23 soil samples (all samples except PA-AC09(0-6)-121912 and PA-AC10(0-6)-121912) in concentrations exceeding the RML for lead of 400 mg/kg. Total lead concentrations exceeding the RML ranged from 570 to 16,000 mg/kg.
- Fine-grained lead was detected in 22 of 23 soil samples (all samples except PA-AC10(0-6)-121912) in concentrations exceeding the RML for lead of 400 mg/kg. Fine-grained lead concentrations exceeding the RML ranged from 1,000 to 9,300 mg/kg.

Lead Bioavailability

Lead bioavailability ranged from 30.2% to 99.5% in the 23 samples collected from the alley.

4.2 RAILROAD SPUR AREA SAMPLING RESULTS

TCLP Metals (Toxicity)

Soil samples PA-RR04,06(0-6)-050613, and PA-RR07,08(6-24)-050613 contained TCLP lead at concentrations of 12 and 13 mg/L, respectively. These TCLP lead concentrations exceed the TCLP lead regulatory limit of 5.0 mg/L. Therefore, according to 40 CFR Part 261, Subpart C, 261.24 (b), these samples represent materials that meet the definition of hazardous waste by virtue of the characteristic of toxicity.

Total Metals

Total metal analytical results were compared to the EPA RMLs for Residential Soil, HQ of 3. Total metal results from the 13 soil samples collected from the alley location are presented on **Table 4-2** and in **Figure 4-3** (for contaminants of concern), and are summarized as follows:

- Copper was detected in soil sample PA-RR04,06(0-6)-050613 at a concentration of 11,000 mg/kg, exceeding the RML for copper of 9,400 mg/kg.
- Lead was detected in 13 of 13 soil samples at concentrations exceeding the RML for lead of 400 mg/kg. Total lead concentrations ranged from 940 to 11,000 mg/kg.
- Fine-grained lead was detected in 13 of 13 soil samples in concentrations exceeding the RML for lead of 400 mg/kg. Total lead concentrations ranged from 900 to 23,000 mg/kg.

• Zinc was detected in soil sample PA-RR04,06(0-6)-050613 at a concentration of 78,000 mg/kg, exceeding the RML for zinc of 70,000 mg/kg.

Lead Bioavailability

Lead bioavailability was analyzed in soil sample PA-RR04,06(0-6)-050613, which contained 78.3% bioavailable lead.

4.3 LITTLE ITALY REFERENCE AREA RESULTS

Total Metals

Total metal analytical results were compared to the EPA RMLs for Residential Soil, HQ of 3. Total metal results from the 16 soil samples collected from the Little Italy reference location are presented on **Table 4-3** and in **Figure 4-4**, and are summarized as follows:

- Lead was detected in two of 16 soil samples at concentrations exceeding the RML for lead of 400 mg/kg. Total lead concentrations were 760 to 930 mg/kg in these two samples.
- Fine-grained lead was detected in three of 16 soil samples at concentrations exceeding the RML for lead of 400 mg/kg. Fine-grained lead concentrations ranged from 520 to 1,400 mg/kg among these samples.
- No other metals were detected in samples above EPA RMLs for Residential Soil, HQ of 3.

4.4 EPA FIELDS XRF QUALITY ASSURANCE ANALYSIS

EPA FIELDS and WESTON START used the EPA's Innov-X Delta and Alpha Series XRF devices in accordance with EPA standard operating procedure (SOP) 302A, "Standard Operating Procedure of Analysis of Metals in Soil using X-Ray Fluorescence." EPA FIELDS and WESTON START conducted an instrument standardization procedure each time the XRF device was activated to verify that the XRF device was operating and performing within manufacturer specifications. EPA FIELDS used simple linear regression and regression diagnostics to find the "best fitting" linear relationship between XRF measurements of lead concentrations in soil samples and their corresponding analytical laboratory concentrations using SAS[®] software. This relationship is quantified in a model (equation). The data included all field sampling events

conducted by EPA and WESTON START in 2012 and 2013, including those performed during the Pilsen downwind residential property site assessment presented in "Site Assessment Report for Pilsen Soil Site: Downwind Residential Area" (WESTON START March, 2014). The EPA FIELDS model equation shows a significant relationship between the lead XRF concentrations and its corresponding laboratory measurement (P<0.05). The EPA FIELDS coefficient of determination (denoted by R^2) for the regression model was 0.92. The EPA FIELDS regression model did not violate the assumptions of no extreme residuals, normal distribution of residuals, and homoscedasticity of residuals. See **Appendix D** for more detail on the development and results of the EPA FIELDS regression model.

4.5 COMPARISON BETWEEN AREAS OF LEAD, FINE-GRAINED LEAD, ZINC, COPPER, TIN, AND CADMIUM CONCENTATIONS

EPA FIELDS used SAS[®] statistical software to compare cadmium, copper, lead, fine-grained lead, tin, and zinc analytical laboratory concentrations between the Site, the Little Italy reference area, and City of Chicago background (USGS 2003). Of samples collected from the Site and the Little Italy reference area, only samples collected from the 0- to 6-inch bgs interval were used in these comparisons. Note that fine-grained lead samples collected by WESTON START were sieved using a 250 µm sieve and all samples collected by USGS (2003) were sieved using a 180 µm sieve. Data were not normally distributed (shown by the Shapiro-Wilk test for normality) and therefore were ranked to perform nonparametric analyses. SAS[®] statistical software was used to compare the areas using one-way analysis of variance (ANOVA) on the ranked data with the general linear models (GLM) procedure. The Type III Sums of Squares result was used since the areas had an unbalanced number of samples. The Least Squares Means Tukey-Kramer Multiple Comparisons test was used to determine differences between the areas. The Least Squares Means Tukey-Kramer Multiple Comparisons test was selected because it accommodates unequal sample sizes and is the most robust test for pairwise comparisons.

There was a significant difference between the three areas for cadmium, copper, lead, tin, and zinc (p-value < 0.05). **Appendix D** presents the methodology and boxplots for each metal for each area. The results of the Least Squares Means Tukey-Kramer Multiple Comparisons test are shown as follows:

	Significant Difference (p-value < 0.05)						
Areas	Cadmium	Copper	Lead	Fine- Grained Lead	Tin	Zinc	
Site & Little Italy Reference Area	Yes	Yes	Yes	Yes	Yes	Yes	
Site & City of Chicago Background	Yes	Yes	Yes	Yes	Yes	Yes	
Little Italy Reference Area & City of Chicago Background	Yes	No	No	No	Yes	No	

Comparison between the Site and the Little Italy Reference Area

Concentrations of cadmium, copper, lead, fine-grained lead, tin, and zinc in Site soil were significantly higher than the Little Italy reference area. These results may suggest the Little Italy reference area, which is located approximately 1.2 miles north of H. Kramer, has not been impacted by the same historic emitters of heavy metals, including H. Kramer. See **Appendix D** for more detail on the EPA FIELDS ANOVA analysis.

Comparison between the Site and the City of Chicago Background

Concentrations of cadmium, copper, lead, fine-grained lead, tin, and zinc concentrations in the Site soil were significantly higher than the City of Chicago background concentrations. These results may suggest the Site has been more impacted by historic emitters of heavy metals than the background soils in the City of Chicago. See **Appendix D** for more detail on the EPA FIELDS ANOVA analysis.

Comparison between the Little Italy Reference Area and the City of Chicago Background

Concentrations of cadmium and tin in the Little Italy reference area soil were significantly lower than the City of Chicago background concentrations. Concentrations of copper, lead, finegrained lead, and zinc were not significantly different in the Little Italy reference area soil and the City of Chicago background concentrations. See **Appendix D** for more detail on the EPA FIELDS ANOVA analysis.

4.6 COMPARISON OF LEAD, ZINC, AND COPPER RELATIVE ABUNDANCES

EPA FIELDS qualitatively compared the relative abundances of lead, zinc, and copper between the Site, City of Chicago background (USGS 2003), Little Italy reference area, and two H. I:\W0\START3\2038\46733RPT.DOC 2038-2A-BLKW Kramer baghouse samples. **Appendix D** presents a graphical depiction of the relative abundances of zinc, lead, and copper in samples collected from the City of Chicago background (USGS 2003), Little Italy reference area, Site, and H. Kramer baghouse. Two sets of H. Kramer baghouse results were analyzed. The first set of H. Kramer baghouse data were provided by H. Kramer's consultant Conestoga-Rovers & Associates and TRC Environmental Corporation (2005). The second set of H. Kramer baghouse data was provided by WESTON START, who submitted baghouse samples collected by the EPA Air and Radiation Division (ARD) to STAT Analysis Corporation in Chicago, IL on July 10, 2013 for total metals analysis.

Zinc, lead, and copper were present in the City of Chicago background samples at approximately 42, 42, and 16 %, respectively. Similarly, zinc, lead, and copper were present in Little Italy reference area samples at approximately 44, 47, and 9 %, respectively. A higher relative abundance of zinc and a lower relative abundance of lead were present in surface soil samples collected from the Site at approximately 66, 16, and 17 % zinc, lead, and copper, respectively. An even higher relative abundance of zinc and lower relative abundance of lead were present in H. Kramer baghouse samples at approximately 92, 7, and 1 % zinc, lead, and copper, respectively for samples analyzed by H. Kramer (2005) and 90, 5, and 5 % zinc, lead, and copper, respectively for baghouse samples analyzed by WESTON START. Based on the higher abundance of zinc (22-24 % higher) and lower relative abundance of lead (26-31 % lower) in Site soils compared to the City of Chicago background and the Little Italy reference area, the Site appears to have been impacted by a release of zinc. H. Kramer baghouse samples contained 90-92 % zinc and approximately 832,567 pounds of zinc have been released via fugitive and stack emissions since 1987 (EPA 2013a). While this analysis does not attribute a release of lead to H. Kramer, within the City of Chicago, detections of lead and zinc have been found to be highly correlated ($R^2 = 0.91$), suggesting that two elements have been added to soil largely from the same material or process rather than independently distributed constituents (USGS 2003).

5. SOIL LITHOLOGY

In general, soils on the alley and the railroad spur properties consisted of silty, sandy, and gravelly fill materials. Some to trace wood chips, cinders, and pieces of glass, brick, plastic, and

slag were observed in numerous borings across the property. In particular, slag was observed in soil borings advanced at the following locations: AY-01, AY-03, AY-07, AY-10, AY-11, AY-14, AY-17, AY-18, and RR-02. Slag is a solid-phase waste generated by secondary lead processing (EPA 1995). Soils in the Little Italy reference area consisted sandy and gravelly silts and clays. Little to trace fill materials including wood chips, cinders, and pieces of glass, plastic, brick were observed in soil at the following properties: 489, 491, 492, 493, 494, 500, and 501.

6. THREATS TO HUMAN HEALTH AND THE ENVIRONMENT

Factors to be considered in determining the appropriateness of a potential removal action at a Site are delineated in the NCP at 40 CFR 300.415(b)(2). A summary of the factors applicable to this Site is presented as follows:

• Actual or potential exposure of nearby human populations, animals, or the food chain to hazardous substances, pollutants, or contaminants.

Hazardous substances, pollutants, and contaminants were documented in surface and subsurface soil samples collected during the site assessment. Soil samples PA-AC03(0-6)-121912, PA-AC04(0-6)-121912, and PA-AY05(6-12)-121912 collected from the alley contained TCLP lead at concentrations of 12, 12, and 9.6 mg/L, respectively. Soil samples PA-RR04,06(0-6)-050613 and PA-RR07,08(6-24)-050613 contained TCLP lead at concentrations of 12 and 13 mg/L, respectively. These TCLP lead concentrations exceed the TCLP lead 40 CFR Part 261, Subpart C, 261.24 (b) regulatory limit of 5.0 mg/L, indicating these soils are hazardous for the characteristic of toxicity. In addition, antimony, arsenic, copper, lead, and zinc were detected in Site soil above EPA RMLs for residential soil, HQ 3.

Mercury was not detected above the EPA RML of 30 mg/kg in any sample collected from the Site. In addition, meteorological data collected from 1928 to 2013 suggests that the predominant wind direction in the Chicago, IL area is from the southwest. As a result, the Site may not been as heavily impacted by the Fisk Station, which has released 805 pounds of mercury into the air from stack emissions from 1998 to 2012 and is located southeast of the Site.

Analytical laboratory concentrations of cadmium, copper, lead, fine-grained lead, tin, and zinc in Site soil samples were significantly higher (p-value < 0.05) than in the samples collected from the Little Italy reference area and the City of Chicago background. These results suggest the Site has been more greatly impacted by historic emitters of heavy metals. In addition, based on the higher abundance of zinc (24-25 % higher) and lower relative abundance of lead (27-33 % lower) in Site soils compared to the City of Chicago background and the Little Italy reference area, the Site appears

to have been impacted by a release of zinc. The Site is located adjacent to H. Kramer, from which approximately 54,366 pounds of lead, 832,567 pounds of zinc, and 6,782 pounds copper have been released via fugitive and stack emissions since 1987 (EPA 2013a).

The Site is located in an industrial, commercial, and residential area of the Pilsen neighborhood in the City of Chicago. Two schools are located within a ¹/₄-mile radius of the Site, Juarez and Perez. School children my use the Site as a walkway, commuting to and from Juarez. In 2010, approximately 40,983 people lived within 1 mile of the Site.

Potential migration pathways and exposure mechanisms include human and animal activities, surface drainage, and wind dispersion. Potential receptors include nearby residents and workers at the adjacent industrial and commercial businesses. Direct contact with hazardous substances is possible, and the close proximity of residential areas to the Site greatly increases the likelihood of exposure of human populations. Exposure could cause imminent endangerment of human health and the environment.

• High levels of hazardous substances, pollutants, or contaminants in soils largely at or near the surface that may migrate.

In general, Site soils consisted of silty, sandy, and gravelly fill materials. Some to trace wood chips, cinders, and pieces of glass, brick, plastic, and slag were observed in numerous borings across the Site. In particular, slag was observed in soil borings advanced at the following locations: AY-01, AY-03, AY-07, AY-10, AY-11, AY-14, AY-17, AY-18, and RR-02. Slag is a solid-phase waste generated by secondary lead processing (EPA 1995). H. Kramer owns and operates a secondary nonferrous metals facility manufacturing primarily brass and bronze ingots.

Site assessment analytical results document high levels of hazardous substances in soils at or near the surface. Surface soil samples PA-AC03(0-6)-121912, PA-AC04(0-6)-121912, and PA-RR04,06(0-6)-050613 were collected from 0 to 6 inches bgs and contained TCLP lead at concentrations exceeding TCLP lead 40 CFR Part 261, Subpart C, 261.24 (b) regulatory limit of 5.0 mg/L. In addition, arsenic, antimony, copper, lead, and zinc were detected in surface soil collected from 0 to 6 inches bgs above EPA RMLs for residential soil, HQ 3. Based on site assessment sampling results, the Site's unrestricted nature, and a lack of an impermeable barrier of the Site, hazardous substances in soils at or near the surface pose a threat of migration.

• Weather conditions that may cause hazardous substances, pollutants, or contaminants to migrate or be released

Cook County, IL, receives a substantial amount of precipitation, and temperatures are normally below freezing during the winter, with regular snowfall. In the winter, the average temperature is 25.1°F and the average daily minimum temperature is 17.3°F. In the summer, the average temperature is 71.7°F, and the average daily maximum temperature is 81.7°F. The average total annual precipitation is 38.65 inches and the

average seasonal snowfall is 32.6 inches. These weather conditions may cause water, wind, and freeze-thaw erosion of Site soils. Eroded soils may migrate via wind and/or surface water runoff to nearby residences or to the Chicago Shipping and Sanitary Canal to the south.

7. SUMMARY AND CONCLUSIONS

The EPA tasked WESTON START with evaluating the potential impacts of possible aerial deposition of heavy metals from historic industrial activity in the vicinity of the Site. The Site is an alley (owned by the City of Chicago) and railroad spur (owned by BSNF railway) located adjacent to H. Kramer in an industrial, commercial, and residential area of the Pilsen neighborhood in the City of Chicago. Two schools are located within a ¹/₄-mile radius of the Site, Juarez and Perez. School children may use the Site as a walkway, commuting to and from Juarez. In 2010, approximately 40,983 people lived within 1 mile of the Site.

On December 19, 2012, the EPA and WESTON START advanced 20 soil borings and submitted 23 samples for analytical laboratory analysis from the alley, located adjacent to the H. Kramer facility to the south. Three samples contained TCLP lead concentrations that exceeded the TCLP lead regulatory limits. Therefore, these samples represent materials that meet the definition of hazardous waste by virtue of the characteristic of toxicity. Antimony, arsenic, copper, lead, and fine-grained lead were detected at concentrations above EPA RMLs for residential soil, HQ 3.

On May 6, 2013, EPA and WESTON START advanced 16 soil borings and submitted 13 samples for analytical laboratory analysis from the railroad spur, located west and south of the H. Kramer property. Two samples contained TCLP lead concentrations that exceeded the TCLP lead regulatory limits. Therefore, these samples represent materials that meet the definition of hazardous waste by virtue of the characteristic of toxicity. Copper, lead, fine-grained lead, and zinc were detected in concentrations were detected in concentrations above EPA RMLs for residential soil, HQ 3.

Site soils generally consisted of silty, sandy, and gravelly fill materials. Some to trace wood chips, cinders, and pieces of glass, brick, plastic, and slag were observed in numerous borings across the Site. In particular, slag was observed in soil borings advanced at the following

locations: AY-01, AY-03, AY-07, AY-10, AY-11, AY-14, AY-17, AY-18, and RR-02. Slag is a solid-phase waste generated by secondary lead processing (EPA 1995). H. Kramer owns and operates a secondary nonferrous metals facility manufacturing primarily brass and bronze ingots.

In August 2013, EPA and WESTON START conducted a field sampling event in the Little Italy reference area. Data collected from this area served as a reference for soil suspected to be less impacted by heavy metal emitters such as H. Kramer and the Fisk Generating Station. Within the Little Italy reference area, lead was detected in two of 16 soil samples in concentrations exceeding the EPA RMLs for residential soil, HQ 3, for lead of 400 mg/kg. Total lead concentrations were 760 and 930 mg/kg among these two samples. Fine-grained lead was detected in three of 16 soil samples at concentrations exceeding the RML for lead of 400 mg/kg. Fine-grained lead concentrations ranged from 520 to 1,400 mg/kg among these samples.

EPA FIELDS used SAS[®] statistical software to compare analytical laboratory concentrations of cadmium, copper, lead, fine-grained lead, tin, and zinc from samples collected from 0 to 6 inches bgs at the Site, the Little Italy reference area, and the City of Chicago background (USGS 2003). Analytical laboratory concentrations of cadmium, copper, lead, fine-grained lead, tin, and zinc in Site soil samples were significantly higher (p-value < 0.05) than in the samples collected from the Little Italy reference area and the City of Chicago background. These results may suggest the Little Italy reference area, which is located approximately 1.2 miles north of H. Kramer, and the City of Chicago background, have not been impacted to the same degree by emitters of heavy metals, including H. Kramer. EPA FIELDS also compared the relative abundances of lead, zinc, and copper between the Site, City of Chicago background, Little Italy reference area, and two H. Kramer baghouse datasets. Based on the higher relative abundance of zinc (24-25 % higher) and lower relative abundance of lead (27-33 % lower) in Site soils compared to the City of Chicago background and the Little Italy reference area, the Site appears to have been impacted by a release of zinc. While this analysis does not attribute a release of lead to H. Kramer, within the City of Chicago, detections of lead and zinc have been found to be highly correlated ($R^2 = 0.91$), suggesting that two elements have been added to soil largely from the same material or process rather than independently distributed constituents (USGS 2003).

Based on the presence of slag in Site soil borings, analytical laboratory results for Site soil samples, and EPA FIELDS comparisons to the Little Italy reference area and City of Chicago background (USGS 2003), the Site appears to have been impacted by an industrial release of cadmium, copper, tin, zinc, and lead. H. Kramer is immediately adjacent to the Site. H. Kramer has released approximately 54,366 pounds of lead, 832,567 pounds of zinc, and 6,782 pounds copper via fugitive and stack emissions since 1987 (EPA 2013a). The close proximity of the Site to H. Kramer may explain the higher surface soil metal concentrations.

Mercury was not detected above the EPA RML of 30 mg/kg in any sample collected from the Site. In addition, meteorological data collected from 1928 to 2013 suggests that the predominant wind direction in the Chicago, Illinois area is from the southwest. As a result, the Site may not been as heavily impacted by the Fisk Station, which has released 805 pounds of mercury into the air from stack emissions from 1998 to 2012, and is located in predominantly crosswind direction southeast of the Site.

2011 and 2012 investigations conducted by NEIC also support the position that H. Kramer and not the Fisk Station contributed to a higher degree to heavy metal contamination at the Site. On August 21, 2011, NEIC submitted a report to EPA Region 5 presenting analytical results of filters containing the highest and lowest concentrations of lead collected at the Perez air monitoring site from January 2010 to January 2011, as well as baghouse dust samples collected at H. Kramer (EPA NEIC 2011). Analytical results indicated cadmium, copper, tin, and zinc were co-contaminants of the lead-bearing particulate matter collected on the TSP filters. These co-contaminants are metals used in alloys produced at H. Kramer and were also found in similar proportions in H. Kramer baghouse dust samples. Lead-bearing, μ m-sized (1–10 μ m) aggregates of zinc-oxide crystallites were common in ambient air in the Pilsen neighborhood on at least six days in 2010, and were similar to the predominant baghouse dust particles from H. Kramer. The report concluded that H. Kramer's furnaces were likely the primary source of lead-bearing airborne particulate matter in the Pilsen neighborhood based on the location of its facility, wind direction, and analytical results of TSP filters and baghouse dust from its facility. However, the Fisk Station could not be excluded as a possible contributing source of lead contamination at the

Perez air monitoring site because particulate matter similar to coal fly ash was observed on the filters collected from Perez. On August 24, 2012, NEIC submitted a second report to EPA Region 5 presenting additional analytical results of lead-bearing particulate matter on TSP filters from the Juarez and Perez air monitoring stations and in coal and fly ash collected from the Fisk Station and Midwest Generation's Crawford Station, in addition to any contribution from H. Kramer. The three key main findings from these analyses are summarized as follows: 1) H. Kramer was indicated as the major contributor of airborne lead-bearing particulate matter in the Pilsen neighborhood, both during and outside the NAAQS exceedance period of October 2010 to February 2011; 2) the Fisk Station contributed insignificant quantities of lead-bearing particulate matter relative to H. Kramer during (and outside) the NAAQS exceedance period of October 2010 to February 2011.

Based on the Site's unrestricted nature and a lack of an impermeable barrier, hazardous substances in soils at or near the surface pose a threat of migration. Potential migration pathways and exposure mechanisms include human and animal activities, surface drainage, and wind dispersion. Potential receptors include nearby residents and workers at the adjacent industrial and commercial businesses. Direct contact with hazardous substances is possible, and the close proximity of residential areas to the Site greatly increases the likelihood of exposure of human populations. Exposure could cause imminent endangerment of human health and the environment.

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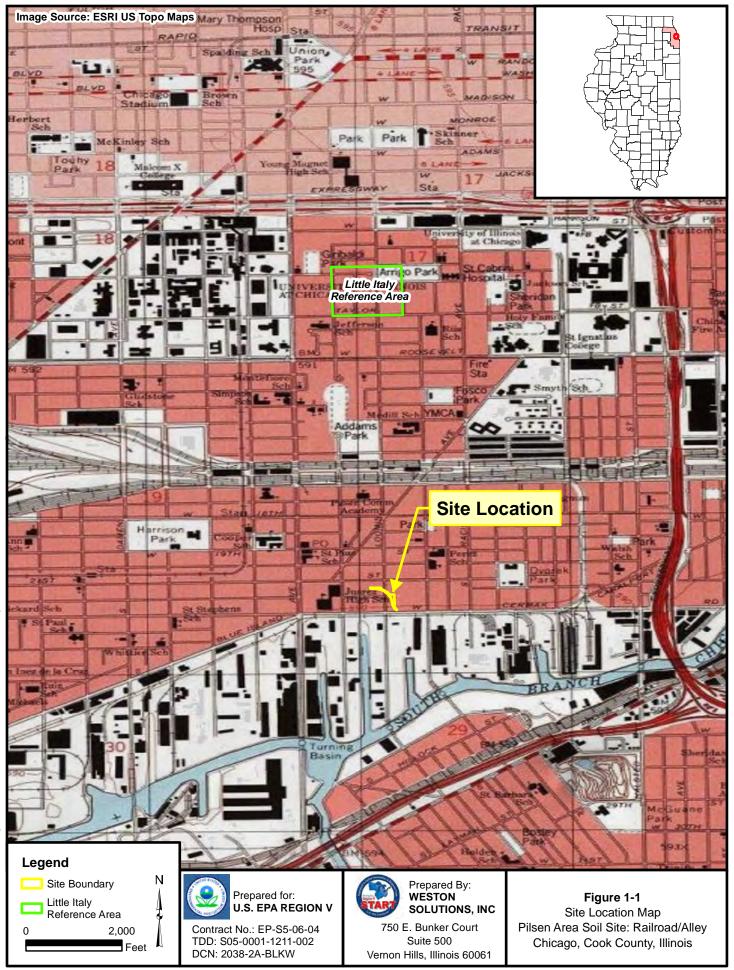
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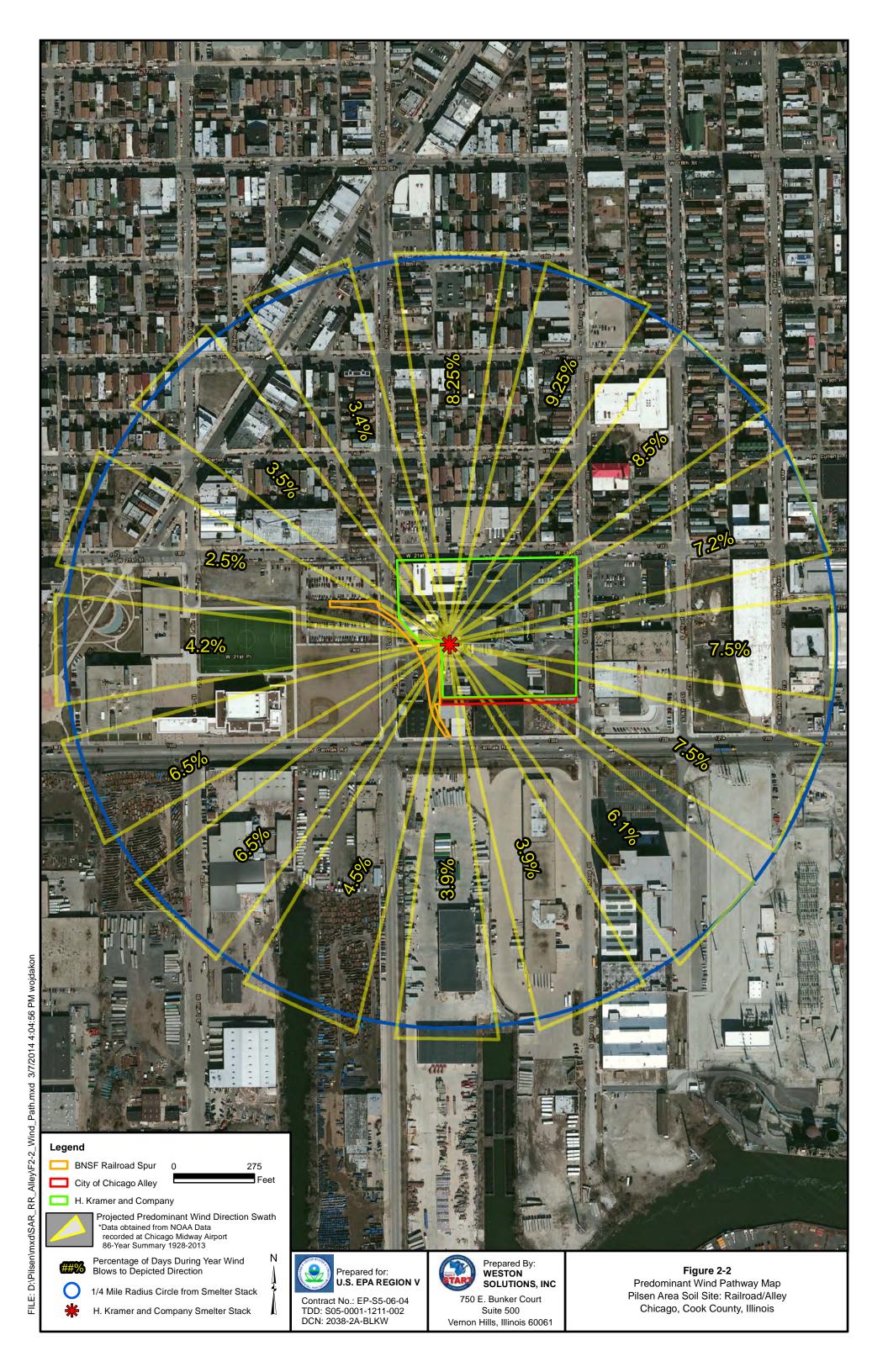
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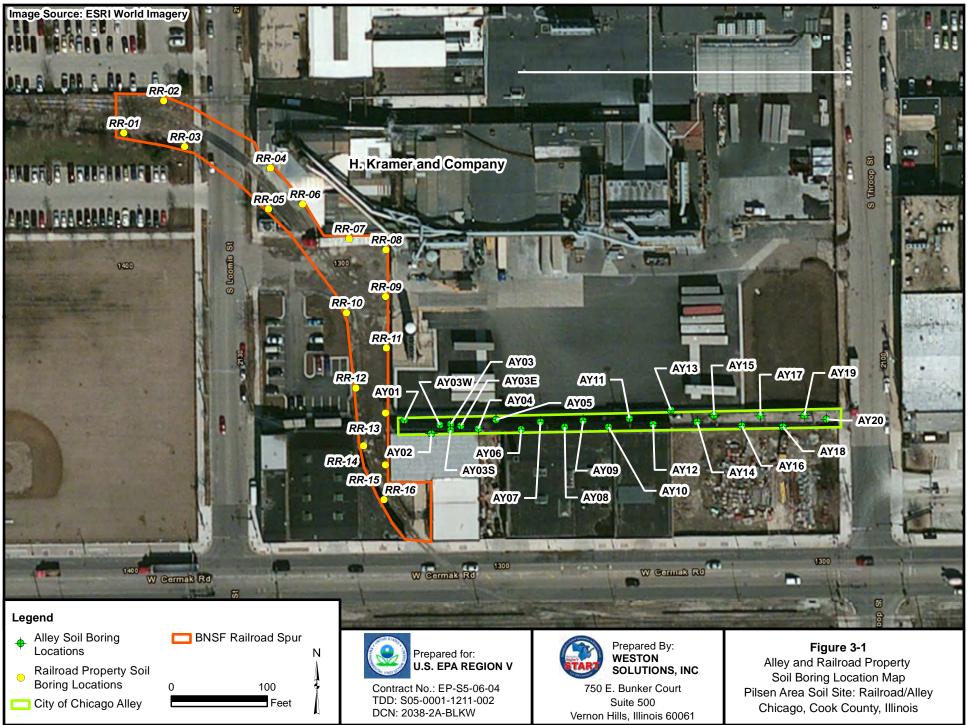
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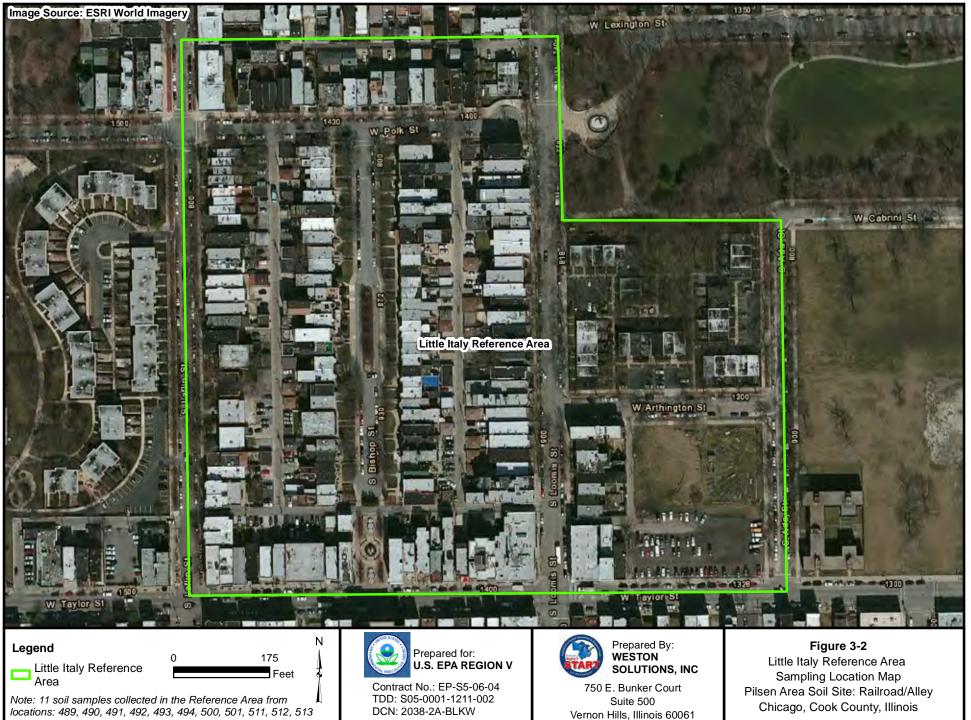
FIGURES

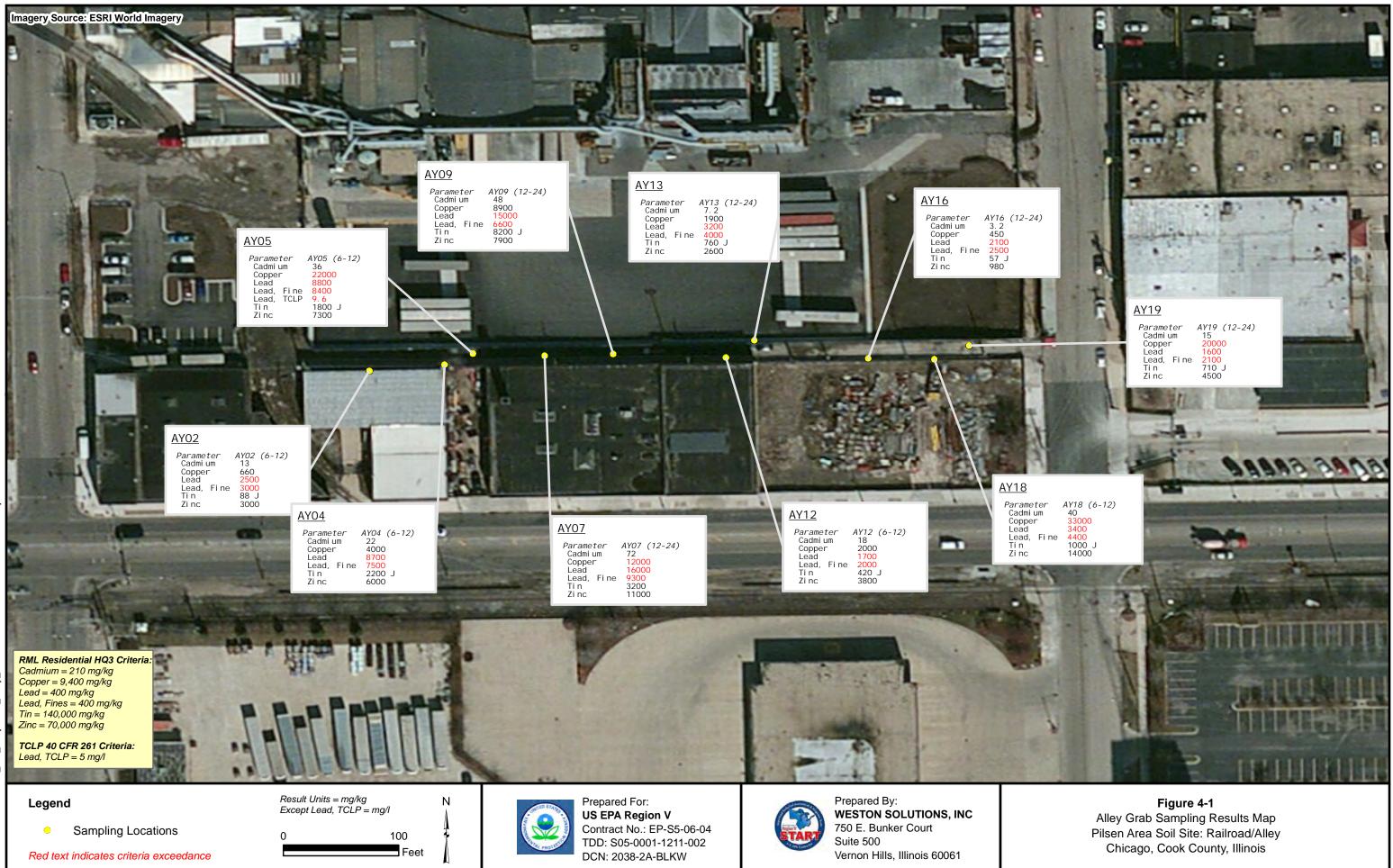


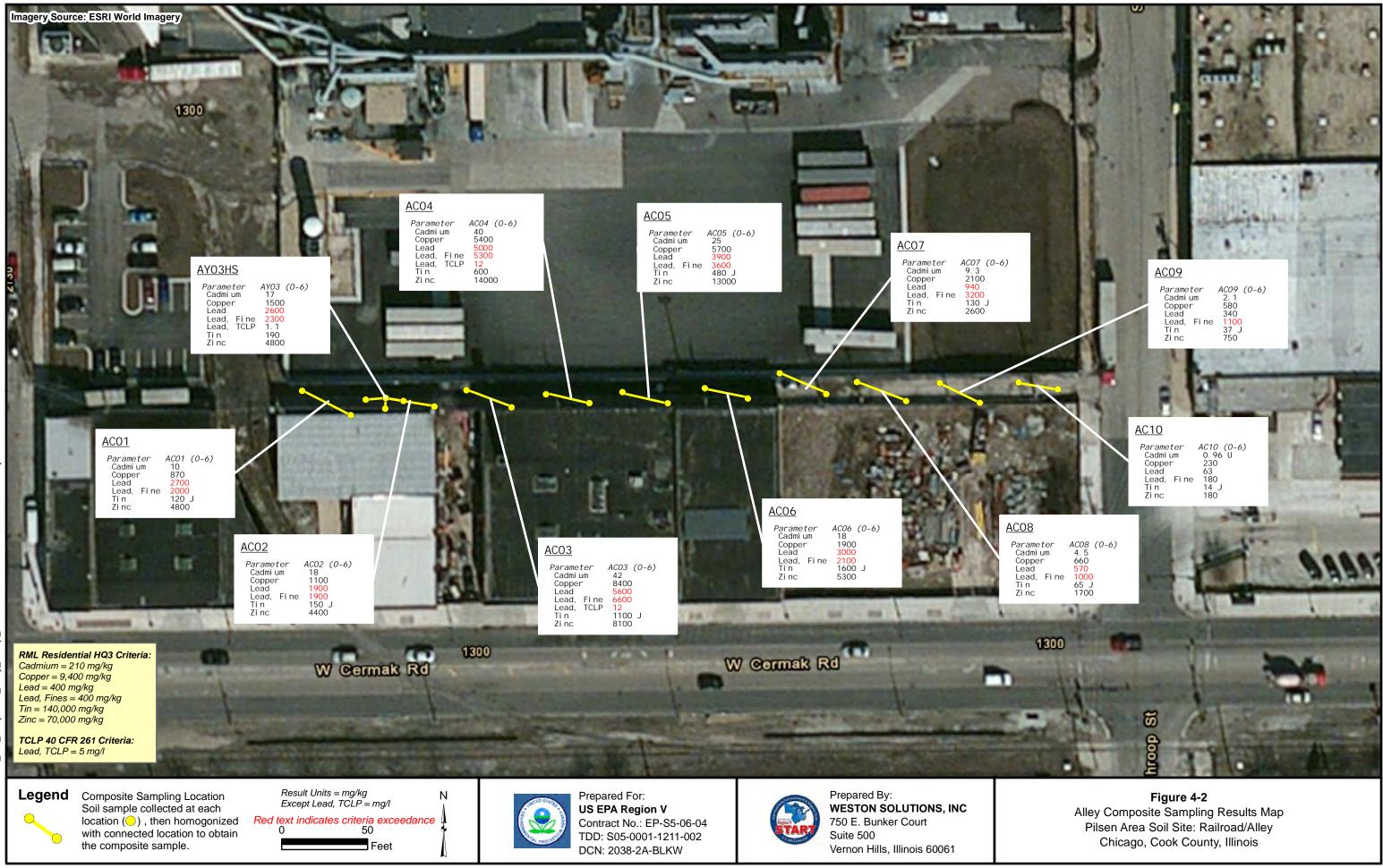


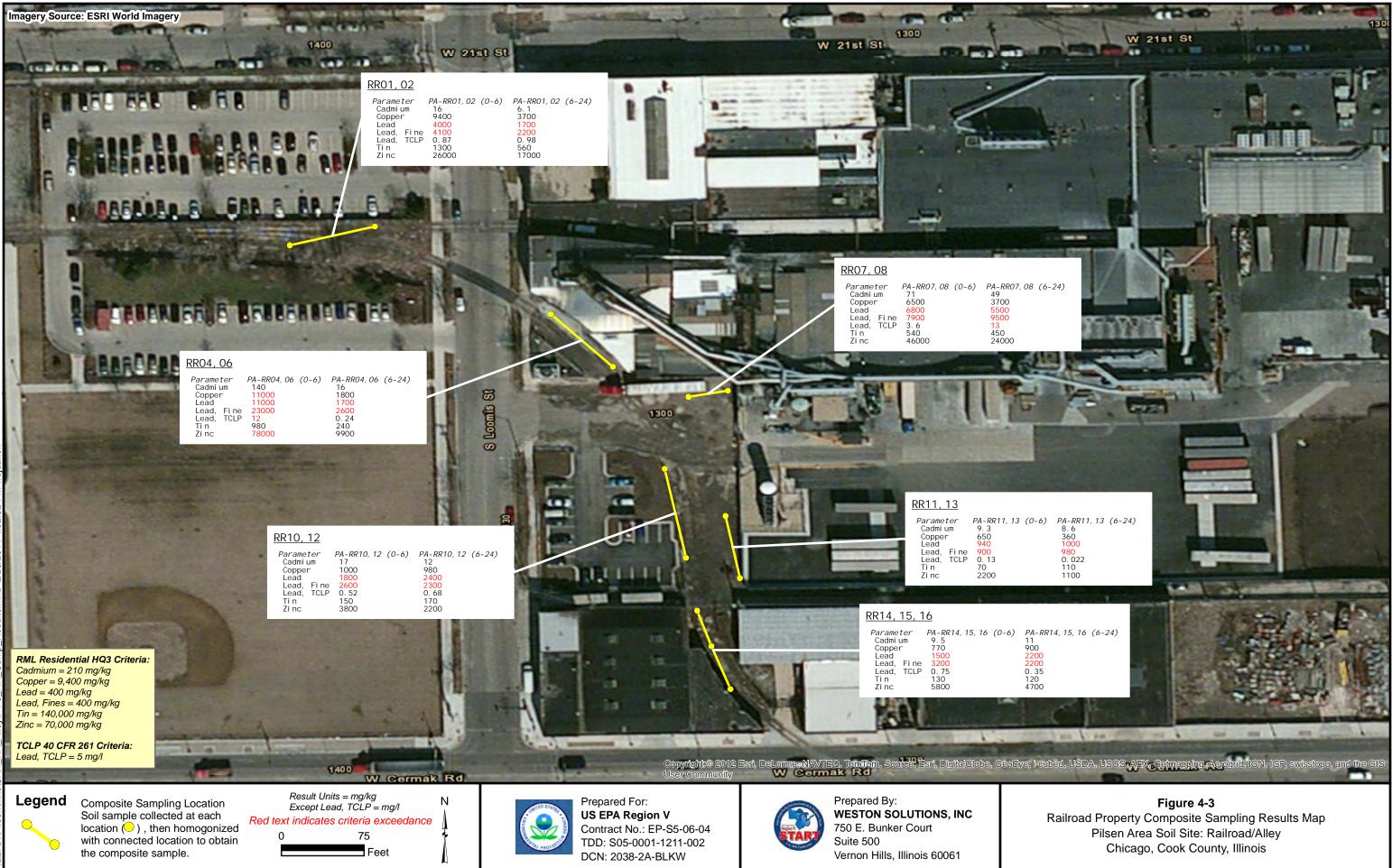


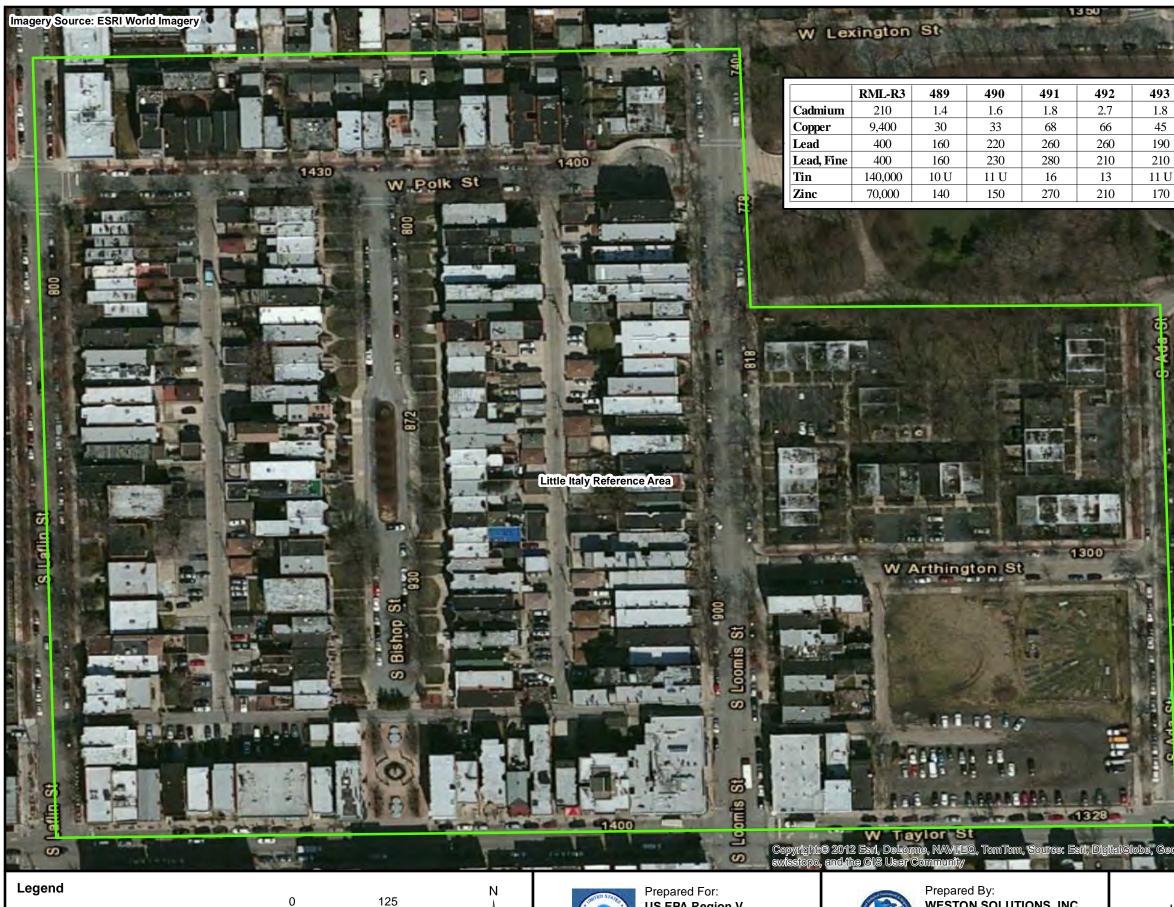








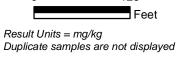




:ILE: D:\Pilsen\mxd\SAR_RR_Alley\F4-4_Italian_Village.mxd_3/26/2014 4:09:2

Little Italy Reference Area

Red text indicates criteria exceedance (RML Residential HQ3 Criteria)





US EPA Region V Contract No.: EP-S5-06-04 TDD: S05-0001-1211-002 DCN: 2038-2A-BLKW



Prepared By: WESTON SOLUTIONS, INC 750 E. Bunker Court Suite 500 Vernon Hills, Illinois 60061

494 500 501 511 512 513 1.8 2 3.4 4.4 1.7 1.7 1.4 45 46 72 28 40 37 45 190 120 320 170 760 66 210 1,300 210 110 66 370 520 23 27 11 U 12 U 13 U 11 U 12 U 10 U 170 170 620 150 230 200 170

W Cabrini St

Figure 4-4 Little Italy Reference Area Sampling Results Map Pilsen Area Soil Site: Railroad/Alley Chicago, Cook County, Illinois

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TABLES

TABLE 3-1 SOIL SAMPLE SUMMARY PILSEN AREA SOIL SITE: RAILROAD/ALLEY PILSEN, CHICAGO, ILLINOIS

								Analyse	S			Analyses	
Sample ID	Date Collected	Sampling Location	Property ID	Sample Type	Depth (in bgs)	Total Metals	Fine- Grained Lead	Coarse- Grained Lead	Bioavailable Lead	TCLP Metals	TCLP Lead	Percent Moisture	pН
December 2012 Field Sampling B	Event (City of	f Chicago Alley)											
PA-AC01(0-6)-121912	12/19/2012	AY01 and AY02	-	С	0-6	Х	X	Х	Х	-	-	Х	X
PA-AC01(0-6)- 121912D PA-AC02(0-6)-121912	12/19/2012	AY01 and AY02 AY03 and AY04	-	C C	0-6	X X	X X	X X	X X	-	-	X X	X X
PA-AC02(0-6)-121912	12/19/2012	A 105 and A 104	-	C	0-6	X	X	X	X	-	-	X	X
PA-AC02(0-6)- 121912D	12/19/2012	AY03 and AY04	-	С	0-6	Х	X	Х	Х	-	-	Х	X
PA-AC03(0-6)-121912	12/19/2012	AY05 and AY06	-	С	0-6	Х	Х	Х	Х	Х	-	Х	X
PA-AC03HS(0-6)-121912	12/19/2012	AY03, AY03E, AY03S and AY03W	-	С	0-6	Х	Х	Х	Х	Х	-	Х	X
PA-AC04(0-6)-121912	12/19/2012	AY07 and AY08	-	С	0-6	Х	Х	Х	Х	Х	-	Х	X
PA-AC05(0-6)-121912	12/19/2012	AY09 and AY10	-	С	0-6	Х	Х	Х	Х	-	-	Х	X
PA-AC06(0-6)-121912	12/19/2012	AY11 and AY12	-	С	0-6	Х	Х	Х	Х	-	-	Х	X
PA-AC07(0-6)-121912	12/19/2012	AY13 and AY14	-	С	0-6	Х	Х	Х	Х	-	-	Х	X
PA-AC08(0-6)-121912	12/19/2012	AY15 and AY16	-	С	0-6	Х	Х	Х	Х	-	-	Х	X
PA-AC09(0-6)-121912	12/19/2012	AY17 and AY18	-	С	0-6	Х	Х	Х	Х	-	-	Х	X
PA-AC010(0-6)-121912	12/19/2012	AY19 and AY20	-	С	0-6	Х	X	Х	X	-	-	Х	X
PA-AY02(6-12)-121912	12/19/2012	AY02	-	Grab	6-12	Х	Х	Х	Х	-	-	Х	X
PA-AY04(6-12)-121912	12/19/2012	AY04	-	Grab	6-12	Х	Х	Х	Х	-	-	Х	Х
PA-AY05(6-12)-121912	12/19/2012	AY05	-	Grab	6-12	Х	Х	Х	Х	Х	-	Х	Х
PA-AY07(12-24)-121912	12/19/2012	AY07	-	Grab	12-24	Х	Х	Х	Х	-	-	Х	X
PA-AY09(12-24)-121912	12/19/2012	AY09	-	Grab	12-24	Х	Х	Х	Х	-	-	Х	Х
PA-AY12(6-12)-121912	12/19/2012	AY12	-	Grab	6-12	Х	Х	Х	Х	-	-	Х	Х
PA-AY13(12-24)-121912	12/19/2012	AY13	-	Grab	12-24	Х	Х	Х	Х	-	-	Х	X
PA-AY16(12-24)-121912	12/19/2012	AY16	-	Grab	12-24	Х	Х	Х	Х	-	-	Х	Х
PA-AY18(6-12)-121912	12/19/2012	AY18	-	Grab	6-12	Х	Х	Х	Х	-	-	Х	X

TABLE 3-1 SOIL SAMPLE SUMMARY PILSEN AREA SOIL SITE: RAILROAD/ALLEY PILSEN, CHICAGO, ILLINOIS

								Analyse	S			Analyses	
	Dete		Devenue	G	Depth	Total	Fine- Grained	Coarse- Grained	Bioavailable	TCLP	TCLP	Percent	
Samula ID	Date Collected	Sompling Location	Property ID	Sample	(in	Metals	Lead	Lead	Lead	Metals	Lead	Moisture	pН
Sample ID	Collected	Sampling Location	ID	Туре	bgs)	Wietais	Ltau	Ltau	Leau	Wittais	Ltau	Moisture	
December 2012 Field Sampling E	Lvent (City of	<u> </u>					-			-			
PA-AY19(12-24)-121912	12/19/2012	AY19	-	Grab	12-24	Х	Х	Х	Х	-	-	Х	X
May Field Sampling Event (BNS	F Railroad S	pur)											
PA-RR01,02(0-6)-050613	5/6/2013	RR-01 and RR-02	-	С	0-6	Х	Х	-	-	Х	Х	Х	X
PA-RR01,02(6-24)-050613	5/6/2013	RR-01 and RR-02	-	С	6-24	Х	X	-	-	Х	Х	Х	X
PA-RR01,02(6-24)-050613D	5/6/2013	RR-01 and RR-02	-	С	6-24	Х	Х	-	-	Х	Х	Х	X
PA-RR04,06(0-6)-050613	5/6/2013	RR-04 and RR-06	-	С	0-6	Х	X	-	Х	Х	Х	Х	X
PA-RR04,06(6-24)-050613	5/6/2013	RR-04 and RR-07	-	С	6-24	Х	X	-	-	Х	Х	Х	X
PA-RR07,08(0-6)-050613	5/6/2013	RR-07 and RR-08	-	С	0-6	Х	X	-	-	Х	Х	Х	X
PA-RR07,08(6-24)-050613	5/6/2013	RR-07 and RR-08	-	С	6-24	Х	X	-	-	Х	Х	Х	X
PA-RR10,12(0-6)-050613	5/6/2013	RR-10 and RR-12	-	С	0-6	Х	Х	-	-	Х	Х	Х	X
PA-RR10,12(6-24)-050613	5/6/2013	RR-10 and RR-12	-	С	6-24	Х	X	-	-	Х	Х	Х	X
PA-RR11,13(0-6)-050613	5/6/2013	RR-11 and RR-13	-	С	0-6	Х	Х	-	-	Х	Х	Х	X
PA-RR11,13(6-24)-050613	5/6/2013	RR-11 and RR-13	-	С	6-24	Х	Х	-	-	Х	Х	Х	X
PA-RR14,15(0-6)-050613	5/6/2013	RR-16	-	С	0-6	Х	Х	-	-	Х	Х	Х	X
PA-RR14,15(6-24)-050613	5/6/2013	RR-16	-	С	6-24	Х	X	-	-	Х	Х	Х	X

TABLE 3-1 SOIL SAMPLE SUMMARY PILSEN AREA SOIL SITE: RAILROAD/ALLEY PILSEN, CHICAGO, ILLINOIS

						Analyses						Analyses	
Sample ID	Date Collected	Sampling Location	Property ID	Sample Type	Depth (in bgs)	Total Metals	Fine- Grained Lead	Coarse- Grained Lead	Bioavailable Lead	TCLP Metals	TCLP Lead	Percent Moisture	pН
August Field Sampling Event ((Little Italy Re	ference Area)											
PA-489-01(6-18)-081213	8/12/2013	Front yard	489	С	6-18	X	X	-	-	-	-	-	-
PA-490-01(0-6)-081213	8/12/2013	Front yard	490	С	0-6	Х	Х	-	-	-	-	-	-
PA-491-01(0-6)-081213	8/12/2013	Front yard	491	С	0-6	Х	Х	-	-	-	-	-	I
PA-491-01(6-18)-081213	8/12/2013	Front yard	491	С	6-18	Х	Х	-	-	-	-	-	-
PA-491-01(6-18)-081213D	8/12/2013	Front yard	491	С	6-18	X	X	-	-	-	-	-	-
PA-492-01(0-6)-081313	8/13/2013	Front yard	492	С	0-6	Х	Х	-	-	-	-	-	-
PA-493-01(0-6)-081313	8/13/2013	Front yard	493	С	0-6	Х	Х	-	-	-	-	-	-
PA-494-01(0-6)-081313	8/13/2013	Area	494	С	0-6	Х	Х	-	-	-	-	-	-
PA-500-01(0-6)-081413	8/14/2013	Backyard	500	С	0-6	Х	Х	-	-	-	-	-	-
PA-500-01(6-24)-081413	8/14/2013	Backyard	500	С	6-24	Х	X	-	-	-	-	-	-
PA-501-01(0-6)-081413	8/14/2013	Front yard	501	С	0-6	Х	Х	-	-	-	-	-	-
PA-503-01(0-6)-081413	8/14/2013	Front yard	503	С	0-6	Х	Х	-	-	-	-	-	-
PA-503-01(6-24)-081413	8/14/2013	Front yard	503	С	6-24	Х	X	-	-	-	-	-	-
PA-511-01(0-6)-081613	8/16/2013	Front yard	511	С	0-6	Х	Х	-	-	-	-	-	-
PA-512-01(0-6)-081613	8/16/2013	Front yard	512	С	0-6	Х	Х	-	-	-	-	-	-
PA-513-01(0-6)-081613	8/16/2013	Front yard	513	С	0-6	Х	X	-	-	-	-	-	-
PA-513-01(0-6)-081613D	8/16/2013	Front yard	513	С	0-6	Х	X	-	-	-	-	-	-
Notes:	C - composit	e sample											

Notes:

% - Percent

C - composite sample ID - Identification

- Not applicable

in - Inches

bgs - Below ground surface

TCLP - Toxicity characteristic leaching procedure

TABLE 4-1 CITY OF CHICAGO ALLEY SOIL SAMPLING RESULTS PILSEN AREA SOIL SITE: RAILROAD/ALLEY CHICAGO, COOK COUNTY, ILLINOIS

				PA-AC01(0-6)-	PA-AC01(0-6)-	PA-AC02(0-6)-	PA-AC02(0-6)-	PA-AC03(0-6)-	PA-AC04(0-6)-	PA-AC05(0-6)-	PA-AC06(0-6)-	PA-AC07(0-6)-	PA-AC08(0-6)-	PA-AC09(0-6)-	PA-AC10(0-6)-	PA-AY02(6-12)-
			Field Sample ID	121912	121912D	121912	121912D	121912	121912	121912	121912	121912	121912	121912	121912	121912
			Location ID	AC01	AC01	AC02	AC02	AC03	AC04	AC05	AC06	AC07	AC08	AC09	AC10	AY02
			Sample Date	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012
			Depth Interval (in bgs)	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	6-12
	EPA RML	40 CFR 261.														
	for Res.	Subpart C,														
Parameter	Soil, HQ 3		Units													
Total Metals	, ,															
Antimony	94	-	mg/kg	25 U	24 U	22 U	26 U	290 J	78 J	29	130 J	24 U	21 U	19 U	19 U	20 U
Arsenic	39	-	mg/kg	26	<u>41</u>	<u>41</u>	41	44 J	28	14	10	6.8	5.5	3.4	1.9 U	40
Barium	46000	-	mg/kg	530	540	500	400	1600	980	540	320	400	140	68	32	680
Cadmium	210	-	mg/kg	10	13	18	12	42	40	25	18	9.3	4.5	2.1	0.96 U	13
Chromium		-	mg/kg	1600	2100	1700	3400	260	150	110	53	24	17	11	7	50
Copper	9400	-	mg/kg	870	1000	1100	1600	8400	5400	5700	1900	2100	660	580	230	660
Lead	400	-	mg/kg	2700	2600	1900	2000	5600	5000	3900	3000	940	570	340	63	2500
Selenium	1200	-	mg/kg	2.5 U	3.7	3.4	2.6 U	3.5 J	3.7	3.4	2.5	2.4 U	2.1 U	1.9 U	1.9 U	2.9
Silver	1200	-	mg/kg	2.5 U	2.4 U	3.1	3	41	19	5.6	2.8	2.4 U	2.1 U	1.9 U	1.9 U	9.6
Tin	140000	-	mg/kg	120 J	130 J	150 J	210 J	1100 J	600	480 J	1600 J	130 J	65 J	37 J	14 J	88 J
Zinc	70000	-	mg/kg	4800	4100	4400	4600	8100	14000	13000	5300	2600	1700	750	180	3000
Mercury	30	-	mg/kg	1.7	1.9	0.77	0.7	3.6	1.3	0.55	0.35	0.37	0.27	0.076	0.044	2.9
TCLP Metals										-						
Arsenic, TCLP	-	5	mg/L	-	-	-	-	0.01 U	0.01 U	-	-	-	-	-	-	-
Barium, TCLP	-	100	mg/L	-	-	-	-	2.3	1.7	-	-	-	-	-	-	-
Cadmium, TCLP	-	1	mg/L	-	-	-	-	0.35	0.4	-	-	-	-	-	-	-
Chromium, TCLP	-	5	mg/L	-	-	-	-	0.01 U	0.01 U	-	-	-	-	-	-	-
Lead, TCLP	-	5	mg/L	-	-	-	-	12	12	-	-	-	-	-	-	-
Selenium, TCLP	-	1	mg/L	-	-	-	-	0.01 U	0.01 U	-	-	-	-	-	-	-
Silver, TCLP	-	5	mg/L	-	-	-	-	0.01 U	0.01 U	-	-	-	-	-	-	-
Mercury, TCLP	-	0.2	mg/L	-	-	-	-	0.0002 U	0.0002 U	-	-	-	-	-	-	-
Miscellaneous Analyses	1	T	a	1.000	1.400	1 600	2000	15000	2.000	2 (00)	1.400	200	200	200	0.0	1000
Lead, Coarse-Grained	-	-	mg/kg	1600	1400	1600	3900	17000	3600	2600	1400	390	300	280	98	4900
Lead, Fine-Grained	400	-	mg/kg	2000	2400	<u>1900</u>	2000	6600	5300	3600	2100	3200	1000	1100	180	3000
Lead, Bioavailable	-	-	%	41.3	50.2	59.6	58	55.1	50.9	64.5	86.1	47.5	97.2	70.8	99.5	42.4
рН	-	-	SU	8.2	8	7.8	7.7	7.8	7.8	7.6	7.7	8.1	8.4	9.9	9.2	8

Notes:

Shaded values indicate concentration exceeds

the EPA RML for Residential Soil, Hazard

Shaded values indicate concentration exceeds 40 CFR Part 261, Subpart C, 261.24 (b)

- = Not applicable or not analyzed

% = Percentbgs = Below ground surface J = Result is estimated mg/kg = milligram per kilogram mg/L = milligram per liter

U = Constituent not detected.

CFR = Code of Federal Regulations Res. = Residential

SU = Standard Unit

HQ = Hazard Quotient ID = Identification

in = Inches

TABLE 4-1 CITY OF CHICAGO ALLEY SOIL SAMPLING RESULTS PILSEN AREA SOIL SITE: RAILROAD/ALLEY CHICAGO, COOK COUNTY, ILLINOIS

				PA-AY03HS(0-6)-	PA-AY04(6-12)-	PA-AY05(6-12)-	PA-AY07(12-24)-	PA-AY09(12-24)-	PA-AY12(6-12)-	PA-AY13(12-24)-	PA-AY16(12-24)-	PA-AY18(6-12)-	PA-AY19(12-24)
			Field Sample ID	121912	121912	121912	121912	121912	121912	121912	121912	121912	121912
			Location ID	AY03HS	AY04	AY05	AY07	AY09	AY12	AY13	AY16	AY18	AY19
			Sample Date	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012
			Depth Interval (in bgs)	0-6	6-12	6-12	12-24	12-24	6-12	12-24	12-24	6-12	12-24
Parameter	EPA RML for Res. Soil, HQ 3	40 CFR 261, Subpart C, 261.24 (b)	Units										
Total Metals													
Antimony	94	-	mg/kg	13 J	440 J	440 J	1200	640 J	26 U	110 J	25 U	54 J	24 U
Arsenic	39	-	mg/kg	51	86	73 J	93	39	15	33	16	18	14
Barium	46000	-	mg/kg	630	1000	2700	4300	2400	420	1200	320	510	300
Cadmium	210	-	mg/kg	17	22	36	72	48	18	7.2	3.2	40	15
Chromium		-	mg/kg	380	510	94 J	150	110	35	37	17	72	30
Copper	9400	-	mg/kg	1500	4000	22000	12000	8900	2000	1900	450	33000	20000
Lead	400	-	mg/kg	2600	8700	8800	16000	15000	1700	3200	2100	3400	1600
Selenium	1200	-	mg/kg	4.6	4	5	4.7	3.2	2.6 U	2.3 U	2.5 U	5.5	2.9
Silver	1200	-	mg/kg	3.1	29	86	23	38	2.6	2.3 U	2.5 U	7.3	5.2
Tin	140000	-	mg/kg	190	2200 J	1800 J	3200	8200 J	420 J	760 J	57 J	1000 J	710 J
Zinc	70000	-	mg/kg	4800	6000	7300	11000	7900	3800	2600	980	14000	4500
Mercury	30	-	mg/kg	2.9	1.5	2.7	1.7	2.6	0.94	0.72	9.2	1.2	0.056
TCLP Metals	-	-	· · · · · ·										-
Arsenic, TCLP	-	5	mg/L	0.01 U	-	0.01 U	-	-	-	-	-	-	-
Barium, TCLP	-	100	mg/L	1.8	-	2.5	-	-	-	-	-	-	-
Cadmium, TCLP	-	1	mg/L	0.083	-	0.24	-	-	-	-	-	-	-
Chromium, TCLP	-	5	mg/L	0.01 U	-	0.01 U	-	-	-	-	-	-	-
Lead, TCLP	-	5	mg/L	1.1	-	9.6	-	-	-	-	-	-	-
Selenium, TCLP	-	1	mg/L	0.01 U	-	0.01 U	-	-	-	-	-	-	-
Silver, TCLP	-	5	mg/L	0.01 U	-	0.01 U	-	-	-	-	-	-	-
Mercury, TCLP	-	0.2	mg/L	0.0002 U	-	0.0002 U	-	-	-	-	-	-	-
Miscellaneous Analyses													
Lead, Coarse-Grained	-	-	mg/kg	1400	17000	26000	29000	5800	1400	5400	2000	4000	1400
Lead, Fine-Grained	400	-	mg/kg	2300	7500	8400	9300	6600	2000	4000	2500	4400	2100
Lead, Bioavailable	-	-	%	46.9	30.2	42.4	49.2	80	75.4	65.1	84.8	73.8	63.9
pH	-	-	SU	7.8	7.7	7.6	7.8	7.4	7.7	8	8	7.5	7.8

Notes:

Shaded values indicate concentration exceeds

the EPA RML for Residential Soil, Hazard

Shaded values indicate concentration exceeds 40 CFR Part 261, Subpart C, 261.24 (b)

- = Not applicable or not analyzed J = Result is estimated
- % = Percent
- bgs = Below ground surface CFR = Code of Federal Regulations
- HQ = Hazard Quotient ID = Identification
- SU = Standard Unit
- in = Inches

- mg/kg = milligram per kilogram mg/L = milligram per literRes. = Residential
- U = Constituent not detected.

TABLE 4-2 BNSF RAILROAD SPUR SOIL SAMPLING RESULTS PILSEN AREA SOIL SITE: RAILROAD/ALLEY CHICAGO, COOK COUNTY, ILLINOIS

			Field Sample ID	PA-RR01,02(0-6)-	PA-RR01,02	PA-RR01,02	PA-RR04,06	PA-RR04,06	PA-RR07,08	PA-RR07,08	PA-RR10,12	PA-RR10,12	PA-RR11,13
			r leiu Sample ID	050613	(6-24)-050613	(6-24)-050613D	(0-6)-050613	(6-24)-050613	(0-6)-050613	(6-24)-050613	(0-6)-050613	(6-24)-050613	(0-6)-050613
			Location ID	RR01,02	RR01,02	RR01,02	RR04,06	RR04,06	RR07,08	RR07,08	RR10,12	RR10,12	RR11,13
			Sample Date	5/6/2013	5/6/2013	5/6/2013	5/6/2013	5/6/2013	5/6/2013	5/6/2013	5/6/2013	5/6/2013	5/6/2013
			Depth Interval (ft bgs)	0-6	6-24	6-24	0-6	6-24	0-6	6-24	0-6	6-24	0-6
	EPA RML	40 CFR 261,											
	for Res.	Subpart C,											
Parameter	Soil, HQ 3	261.24 (b)	Unit										
Total Metals													
Antimony	94	-	mg/kg	19 J	7.4 J	23 U	18 J	4.1 U	12 J	9 J	14 J	34 J	6.4 J
Cadmium	210	-	mg/kg	16	6.1	8.6	140	16	71	49	17	12	9.3
Chromium	-	-	mg/kg	64	34	35	56	27	45	43	53	35	220
Copper	9400	-	mg/kg	9400	3700	2500	11000	1800	6500	3700	1000	980	650
Lead	400	-	mg/kg	4000	1700	1500	11000	1700	6800	5500	1800	2400	940
Lead, Fine-Grained	400	-	mg/kg	4100	2200	2200	23000	2600	7900	9500	2600	2300	900
Tin	140000	-	mg/kg	1300	560	600	980	240	540	450	150	170	70
Zinc	70000	-	mg/kg	26000	17000	14000	78000	9900	46000	24000	3800	2200	2200
Mercury	30	-	mg/kg	0.52	0.63	0.59	0.61	1.6	0.72	0.65	1.1	1.5	0.55
TCLP Metals													
Lead, TCLP		5	mg/L	0.87	0.98	5	12	0.24	3.6	13	0.52	0.68	0.13
Other Analyses	-												
Lead, Bioavailable	-	-	%	-	-	-	78.3	-	-	-	-	-	-

Notes:

Shaded values indicate concentration exceeds the EPA RML for

Residential (HQ3)

Shaded values indicate concentration exceeds 40 CFR Part 261,

Subpart C

- = Not applicable or not analyzed

% = Percent

bgs = Below ground surface

CFR = code of federal regulations

ft = feet

ID = Identification

J = value is an estimated quantity

mg/kg = milligram per kilogram

mg/L = milligram per liter

RML - removal management level

U = Constituent not detected. Reporting limit is presented.

TABLE 4-2 BNSF RAILROAD SPUR SOIL SAMPLING RESULTS PILSEN AREA SOIL SITE: RAILROAD/ALLEY CHICAGO, COOK COUNTY, ILLINOIS

			Field Sample ID	PA-RR11,13	PA-RR14,15,16	PA-RR14,15,16
			r leiu Sample ID	(6-24)-050613	(0-6)-050613	(6-24)-050613
			Location ID	RR11,13	RR14,15,16	RR14,15,16
			Sample Date	5/6/2013	5/6/2013	5/6/2013
			Depth Interval (ft bgs)	6-24	0-6	6-24
	EPA RML	40 CFR 261,				
	for Res.	Subpart C,				
Parameter	Soil, HQ 3	261.24 (b)	Unit			
Total Metals						
Antimony	94	-	mg/kg	8.8 J	4.7 J	5.2 J
Cadmium	210	-	mg/kg	8.6	9.5	11
Chromium	-	-	mg/kg	43	900	2000
Copper	9400	-	mg/kg	360	770	900
Lead	400	-	mg/kg	1000	1500	2200
Lead, Fine-Grained	400	-	mg/kg	980	3200	2200
Tin	140000	-	mg/kg	110	130	120
Zinc	70000	-	mg/kg	1100	5800	4700
Mercury	30	-	mg/kg	0.58	1.2	0.78
TCLP Metals						
Lead, TCLP		5	mg/L	0.022	0.75	0.35
Other Analyses	-					
Lead, Bioavailable	-	-	%	-	-	-

Notes:

Shaded values indicate concentration exceeds the EPA RML for

Residential (HQ3)

Shaded values indicate concentration exceeds 40 CFR Part 261,

Subpart C

- = Not applicable or not analyzed

% = Percent

bgs = Below ground surface

CFR = code of federal regulations

ft = feet

ID = Identification

J = value is an estimated quantity

mg/kg = milligram per kilogram

mg/L = milligram per liter

RML - removal management level

U = Constituent not detected. Reporting limit is presented.

2038-2A-BLKW

TABLE 4-3 LITTLE ITALY REFRENCE AREA SOIL SAMPLING RESULTS PILSEN SOIL SITE: RAILROAD/ALLEY CHICAGO, COOK COUNTY, ILLINOIS

		Field Sample ID	PA-489-01(0-6)-	PA-489-01(6-18)-	PA-490-01(0-6)-	PA-491-01(0-6)-	PA-491-01(6-18)-	PA-491-01(6-18)-	PA-492-01(0-6)-	PA-493-01(0-6)-	PA-494-01(0-6)-	PA-500-01(0-6)-
			081213	081213	081213	081213	081213	081213D	081313	081313	081313	081413
		Location ID	489	489	490	491	491	491	492	493	494	500
		Sample Date	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/13/2013	8/13/2013	8/13/2013	8/14/2013
		Depth Interval (in bgs)	0-6	6-18	0-6	0-6	6-18	6-18	0-6	0-6	0-6	0-6
	EPA RML for Res.											
Parameter	Soil, HQ 3	Unit										
Total Metals												
Antimony	94	mg/kg	4.2 U	4.4 U	4.4 U	4.8 U	4.5 U	4.1 U	4.4 U	4.3 U	4.6 U	4.4 U
Cadmium	210	mg/kg	1.4	1.4	1.6	1.8	1.6	1.5	2.7	1.8	2	3.4
Chromium	-	mg/kg	17	18	19	21	36	17	24	16	33	26
Copper	9400	mg/kg	30	28	33	68	71	65	66	45	46	72
Lead	400	mg/kg	160	92	220	260	270	260	260	190	120	760
Lead, Fine-Grained	400	mg/kg	160	150	230	280	400	390	210	210	110	1300
Tin	140000	mg/kg	10 U	11 U	11 U	16	15	16	13	11 U	12 U	27
Zinc	70000	mg/kg	140	120	150	270	250	230	210	170	170	620
Mercury	30	mg/kg	0.14	0.13	0.29	0.42	0.6	0.66	0.33	0.39	0.17	0.88

Notes:

Shaded/Bolded values indicate concentration exceeds the EPA RML for Residential Soil, Hazard Quotient 3

- = Not applicable or not analyzed

bgs = Below ground surface

HQ = Hazard quotient

ID = Identification

in = Inches

mg/kg = milligram per kilogram

Res. = Residential

RML = Removal Action Levels

U = Constituent not detected. Reporting limit is presented.

TABLE 4-3 LITTLE ITALY REFRENCE AREA SOIL SAMPLING RESULTS PILSEN SOIL SITE: RAILROAD/ALLEY CHICAGO, COOK COUNTY, ILLINOIS

		Field Sample ID	PA-500-01(6-24)-	PA-501-01(0-6)-	PA-511-01(0-6)-	PA-512-01(0-6)-	PA-513-01(0-6)-	PA-513-01(0-6)-
			081413	081413	081613	081613	081613	081613D
		Location ID	500	501	511	512	513	513
		Sample Date	8/14/2013	8/14/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013
		Depth Interval (in bgs)	6-24	0-6	0-6	0-6	0-6	0-6
	EPA RML for Res.							
Parameter	Soil, HQ 3	Unit						
Total Metals								
Antimony	94	mg/kg	3.9 U	5.2 U	4.4 U	4.7 U	4.2 U	4.2 U
Cadmium	210	mg/kg	3.1	1.4	1.7	1.7	1.4	1.3
Chromium	-	mg/kg	22	22	21	19	31	23
Copper	9400	mg/kg	88	28	40	37	45	42
Lead	400	mg/kg	930	66	210	320	170	140
Lead, Fine-Grained	400	mg/kg	1400	66	370	520	230	210
Tin	140000	mg/kg	28	13 U	11 U	12 U	10 U	10 U
Zinc	70000	mg/kg	690	150	170	230	200	200
Mercury	30	mg/kg	1.7	0.081	0.2	0.27	0.2	0.28

Notes:

Shaded/Bolded values indicate concentration exceeds the EPA RML for

- = Not applicable or not analyzed

bgs = Below ground surface

HQ = Hazard quotient

ID = Identification

in = Inches

mg/kg = milligram per kilogram

Res. = Residential

RML = Removal Action Levels

U = Constituent not detected. Reporting limit is presented.

APPENDIX A PHOTOGRAPHIC DOCUMENTATION



Site: Pilsen Area Soil Site: Railroad/AlleyPhoto Number: 1Date: 12/12/12Direction: WestPhotographer: D. SenaSubject: Eastern portion of the City of Chicago alley with the H. Kramer property to the north.



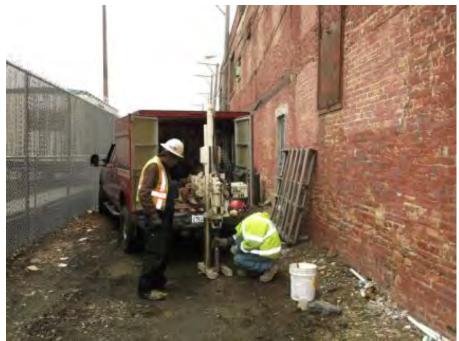
Site: Pilsen Area Soil Site: Railroad/AlleyPhoto Number: 2Date: 12/12/12Direction: WestPhotographer: D. SenaSubject: Western portion of the City of Chicago alley with the H. Kramer property to the north.

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 Site: Pilsen Area Soil Site: Railroad/Alley

 Photo Number: 3
 Date: 12/19/12

 Direction: East
 Photographer: D. Sena

 Subject: Cabeno Environmental Field Services, LLC advancing Geoprobe in City of Chicago alley.



Site: Pilsen Area Soil Site: Railroad/AlleyPhoto Number: 4Date: 12/19/12Direction: DownPhotographer: D. SenaSubject: Soil boring advanced from location AY-05 from 0-48 inches below ground surface.

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A-2

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Site: Pilsen Area Soil Site: Railroad/AlleyPhoto Number: 5Direction: SouthSubject: EPA FIELDS advancing Geoprobe at RR-01.

Date: 5/6/13 Photographer: D. Sena



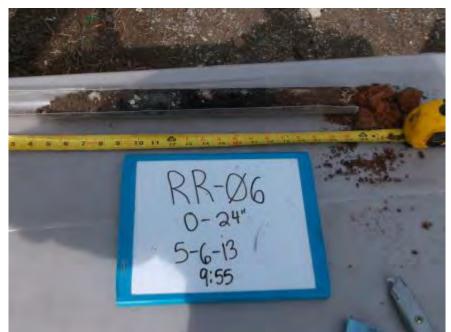
Site: Pilsen Area Soil Site: Railroad/AlleyPhoto Number: 6Date: 5/6/13Direction: EastPhotographer: D. SenaSubject: EPA FIELDS advancing Geoprobe at RR-04, adjacent to H. Kramer facility.

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A-3



Site: Pilsen Area Soil Site: Railroad/AlleyPhoto Number: 7Date: 5/6/13Direction: NorthPhotographer: D. SenaSubject: EPA FIELDS advancing Geoprobe at RR-14, with the H. Kramer facility in the background.



 Site: Pilsen Area Soil Site: Railroad/Alley
 Date: 5/6/13

 Photo Number: 8
 Date: 5/6/13

 Direction: Down
 Photographer: D. Sena

 Subject: Soil boring advanced from location RR-06 from 0-24 inches below ground surface.

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APPENDIX B SOIL BORING LOGS

	V	Nes	ston Solutions, Inc. 750 E Bunker Ct				AY-01
		١	/ernon Hills, IL 60061				(Page 1 of 1)
		Pilse	EPA Region V Contract: EP-S5-06-04 en Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no I Sena	Latitude: : 41.8528869045 Longitude: : -87.6605064821
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Feet	USCS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS
0	-		SILT FILL - Grayish black, mediur rounded gravel, some wood chips plastic	n soft, dry, some , some pieces of			Composite soil sample PA-AC01(0-6)-121912 and PA-AC01(0-6)-121912D collected from 0 to 6 inches bgs
	FL						
- - - 2-	-		SILT FILL - Brown black, medium	firm. drv. some		95%	
-	FL		angular gravel				
	FL		SILT FILL - Red, black, orange, n sand, trace fine-grained angular g	nedium soft, some ravel, trace slag			
-	-		End of boring at 4.0 ft bgs.				
6-							

	۷	Ve	ston Solutions, Inc. 750 E Bunker Ct				AY-02
		,	Vernon Hills, IL 60061				(Page 1 of 1)
	 (Pilse	EPA Region V Contract: EP-S5-06-04 en Soil Site: Railroad/Alley eago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no I Sena	Latitude : 41.85284859 Longitude: : -87.66040217
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Feet	USCS	GRAPHIC	DESCRIPTIC	ON	Sample	Recovery (percent)	REMARKS
0			CLAYEY SILT FILL - Dark brown, sand, some fine-grained angular g graded, trace glass and brick piece	ravel, well			Comnposite soil sample PA-AC01(0-6)-121912 & PA-AC01(0-6)-121912D collected from 0 to 6 inches bgs
- - - 1-							Grab soil sample PA-AY02(6-12)-121912 collected from 6 to 12 inches bgs
2-	FL					75%	
			As above				
3-							
	-						
			End of boring at 4.0 ft bgs.				
5-							
6-							

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	Weston Solutions, Inc. 750 E Bunker Ct Vernon Hills, IL 60061						AY-03
		١	/ernon Hills, IL 60061				(Page 1 of 1)
		Pilse	EPA Region V Contract: EP-S5-06-04 en Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no Sena	Latitude : 41.85287639 Longitude : -87.66032823
		0	Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Feet	S	GRAPHIC	DESCRIPTIO	N	Sample	Recovery (percent)	REMARKS
-0	FL						Composite soil sample PA-AC020-6)-121912 & PA-AC02(0-6)-121912D collected from 0 to 6 inches bgs
	FL					90%	
	-						
4- 		nriel.	End of boring at 4.0 ft bgs.			1	1

	Weston Solutions, Inc. 750 E Bunker Ct			AY-04						
		١	/ernon Hills, IL 60061				(Page 1 of 1)			
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date : 12/19/2012 Drill Rig Type : Geoprobe Drilling Company : Cabeno Weston Geoscientist : David Sena Total Depth : 4.0 ft bgs			Latitude : 41.85286342 Longitude : -87.66022353			
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Feet	NSCS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS			
0			SANDY SILT FILL - Dark brown, r trace fine-grained subrounded gra	nedium soft, dry, vel			Comnposite soil sample PA-AC02(0-6)-121912 & PA-AC02(0-6)-121912D collected from 0 to 6 inches bgs			
- - - - -	FL						Grab soil sample PA-AY04(6-12)-121912 collected from 6 to 12 inches bgs			
-										
2-			SILT FILL - Black, medium firm, m	noist. some sand.		90%				
			trace fine-grained angular gravel,	some brick pieces						
3-	FL									
-										
4			End of boring at 4.0 ft bgs.							
5										
6-										

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	Weston Solutions, Inc. 750 E Bunker Ct			AY-05						
		١	/ernon Hills, IL 60061				(Page 1 of 1)			
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no I Sena	Latitude : 41.8528897 Longitude : -87.66015578			
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Feet	NSCS	GRAPHIC	DESCRIPTIO	N	Sample	Recovery (percent)	REMARKS			
0	FL		SILTY CLAY FILL - Dark brown, d fine-grained subrounded gravel, tr	lry, trace ace glass pieces			Composite soil sample PA-AC03(0-6)-121912 collected from 0 to 6 inches bgs			
- - - - 1-							Grab soil sample PA-AY05(6-12)-121912 collected from 6 to 12 inches bgs			
-	FL		SILTY SAND FILL - Gray, medium coarse-grained angular gravel SILT FILL - Black, medium firm, c		_					
2-			trace cinders	ny, some sanu,		90%				
	FL									
4			End of boring at 4.0 ft bgs.							
5-										
- - - - 6-										

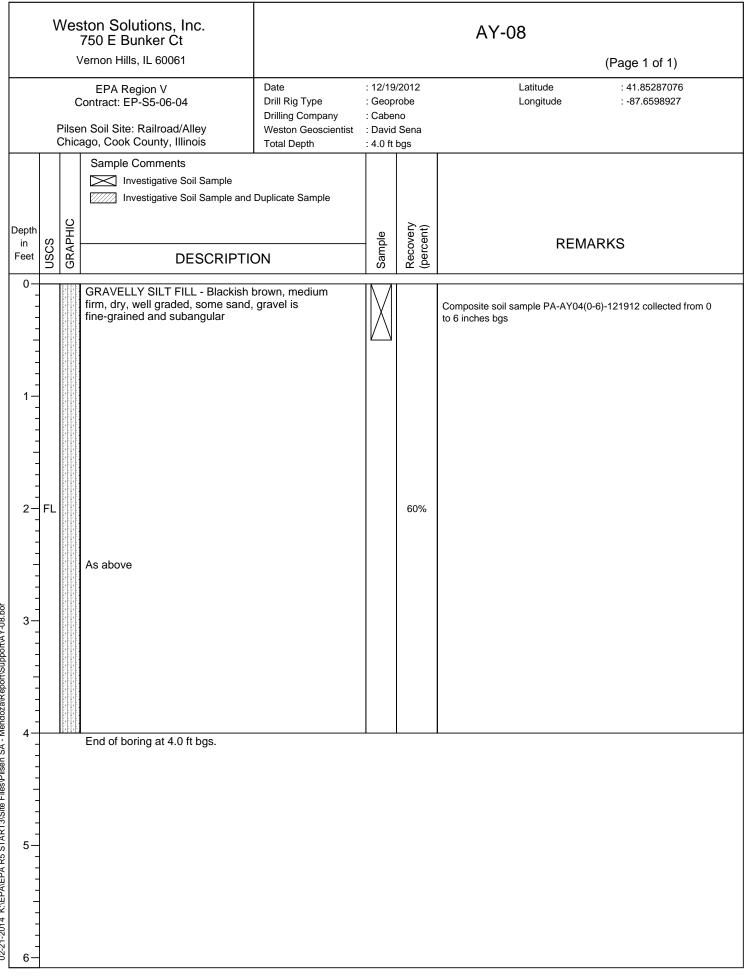
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	Weston Solutions, Inc. 750 E Bunker Ct			AY-06						
			Vernon Hills, IL 60061				(Page 1 of 1)			
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : Davic : 4.0 ft	robe no I Sena	Latitude : 41.85286302 Longitude : -87.66005877			
		0	Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Feet	S	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS			
-0	-		SILT FILL - Black, medium firm, d trace medium-grained subangular graded, brick layer at 2 ft bgs	ry, some sand, gravel, poorly			Composite soil sample PA-AY04(0-6)-121912 collected from 0 to 6 inches bgs			
1- 	- - - - - - - - - - - - - - - - - - -		As above			90%				
3-			As above							
4-			End of boring at 4.0 ft bgs.		1	1	1			
5										

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	Weston Solutions, Inc. 750 E Bunker Ct			AY-07						
		١	/ernon Hills, IL 60061	(Page 1 of 1)						
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no Sena	Latitude : 41.85288437 Longitude : -87.65998557			
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Feet	USCS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS			
0 			SANDY SILT FILL - Brown, mediu fine-grained angular gravel, well g glass, wood chips, and brick piece	raded, some			Composite soil sample PA-AC04(0-6)-121912 collected from 0 to 6 inches bgs			
1- -	FL					90%	Grab soil sample PA-AY07(12-24)-121912 collected from 12 to 24 inches bgs			
			As above							
	FL		SILTY SAND FILL - Light brown, r poorly graded, some slag	nedium tight, moist,						
4			End of boring at 4.0 ft bgs.							
6-										

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	Weston Solutions, Inc. 750 E Bunker Ct		AY-09								
		١	/ernon Hills, IL 60061		(Page 1 of 1)						
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Caber : David : 4.0 ft	robe no I Sena	Latitude : 41.85288864 Longitude : -87.6598224				
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample							
Depth in Feet	USCS	GRAPHIC	DESCRIPTIO	NC	Sample	Recovery (percent)	REMARKS				
0	-		SILT FILL - Black and red, loose, medium-grained subrounded grav trace pieces of glass and brick	dry, some el, well graded,			Composite soil sample PA-AC05(0-6)-121912 collected from 0 to 6 inches bgs				
	FL					75%	Grab soil sample PA-AY09(12-24)-121912 collected from 12 to 24 inches bgs				
2	FL		SILTY SAND AND GRAVEL FILL red, medium tight, moist, well grad	- Light gray and ded		75%					
	FL		SILT FILL - Black, soft, moist, son subangular gravel, well graded, so	ne medium-grained ome brick							
4	-		End of boring at 4.0 ft bgs.		•						
5											
6-	-										

Weston Solutions, Inc. 750 E Bunker Ct			ston Solutions, Inc. 750 E Bunker Ct	AY-10						
		١	/ernon Hills, IL 60061				(Page 1 of 1)			
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date: 12/19/2012Drill Rig Type: GeoprobeDrilling Company: CabenoWeston Geoscientist: David SenaTotal Depth: 4.0 ft bgs			Latitude : 41.85287145 Longitude : -87.65972522			
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Feet	NSCS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS			
0	FL		SILT AND GRAVEL FILL - Black a gravel is angular and medium-gra some slag and wood chips	and orange, dry, ined, well graded,			Composite soil sample PA-AC05(0-6)-121912 collected from 0 to 6 inches bgs			
- - 1- -	SANDY SILT FILL - Black, dry, some fine-grained angular gravel, poorly graded, trace wood chips and glass			-						
					75%					
	FL									
3-	-		As above with some orangish-gra	y sand						
4-		19149.	End of boring at 4.0 ft bgs.		1		I			
5										

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	١	We	eston Solutions, Inc. 750 E Bunker Ct	AY-11						
			Vernon Hills, IL 60061				(Page 1 of 1)			
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19/2012 : Geoprobe : Cabeno : David Sena : 4.0 ft bgs		Latitude : 41.8528959 Longitude : -87.65964595			
			Sample Comments Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample		× -				
Depth in Feet	S		DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS			
0-	- - - - - FL -	SILT FILL - Black, dry, some medius gravel, trace brick and glass		um-grained angular			Composite soil sample PA-AC06(0-6)-121912 collected from 0 to 6 inches bgs			
-1- -2- -2- -2-	- - - - - - - - - - - - - - - - - - -	FL	SANDY SILT FILL - Black, mediur fine-grained subrounded gravel, tra- slag and glass	n firm, dry, some ace cobble, trace		95%				
Mendoza/Repor	- FL		SANDY SILT FILL - Black and bro moist, poorly graded	wn, medium soft,						
02-21-2014 K:\EPA\EPA R5 START3\Site Files\Plisen SA - Mendoza\Report\Support\AY-11.bor 9			End of boring at 4.0 ft bgs.							

	Weston Solutions, Inc. 750 E Bunker Ct		AY-12							
		١	/ernon Hills, IL 60061	(Page 1 of 1)						
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date: 12/19/2012Drill Rig Type: GeoprobeDrilling Company: CabenoWeston Geoscientist: David SenaTotal Depth: 4.0 ft bgs			Latitude : 41.85287987 Longitude : -87.6595544			
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Feet	NSCS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS			
0			SANDY SILT FILL - Black, mediur trace fine-grained subangular grav trace brick	n firm, dry to moist, /el, poorly graded,			Composite soil sample PA-AC06(0-6)-121912 collected from 0 to 6 inches bgs			
- - - 1-							Grab soil sample PA-AY12(6-12)-121912 collected from 6 to 12 inches bgs			
-	FL									
2-						75%				
			Same as above							
3			SANDY SILT FILL - Black, some b chips, trace fine-grained subangul subangular cobble	prick and wood ar gravel, trace	_					
	FL									
-			End of boring at 4.0 ft bgs.							
- - - 5-										
6-										

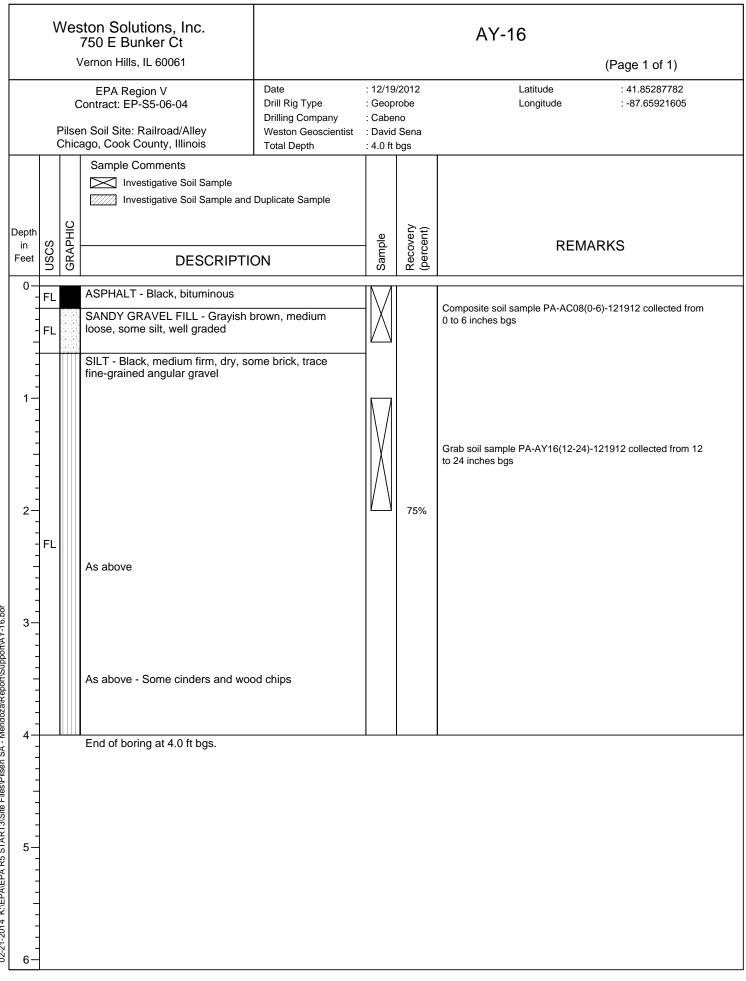
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	Weston Solutions, Inc. 750 E Bunker Ct			AY-13						
		١	/ernon Hills, IL 60061	(Page 1 of 1)						
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19/2012 : Geoprobe : Cabeno : David Sena : 4.0 ft bgs		Latitude Longitude	: 41.8529209 : -87.65948668		
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Feet	NSCS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMA	RKS		
-0			SANDY SILT FILL - Black, mediur coarse-grained angular gravel, we	n loose, dry, some Il graded			Composite soil sample PA-AC07(0 inches bgs	-6)-121912 collected from 0 to 6		
1- - - - - - - - - - - - - - - - - - -	FL		Same as above			75%	Grab soil sample PA-AY13(12-24)- inches bgs	121912 collected from 12 to 24		
-	FL		SILTY SAND FILL - Gray and blac dry, some gravel, poorly graded	ck, medium firm,						
3-	FL		SANDY SILT FILL - Black and ora dry, trace wood chips	inge, medium soft,						
4			End of boring at 4.0 ft bgs.							
- - - - - - - - -										

	Weston Solutions, Inc. 750 E Bunker Ct Vernon Hills, IL 60061						AY-14
		١	Vernon Hills, IL 60061				(Page 1 of 1)
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no I Sena	Latitude : 41.85288814 Longitude : -87.65938658
Depth in Feet	USCS	GRAPHIC	Sample Comments Investigative Soil Sample Investigative Soil Sample and Investigative Soil Sample with DESCRIPTIC	MS/MSD	Sample	Recovery (percent)	REMARKS
0-		0				<u> </u>	
-	FL SP	00000 0000 0000 0000 0000 0000 0000 0000	ASPHALT - Black, bituminous SAND AND GRAVEL FILL - Black medium loose, poorly graded,	and gray, dry,			Composite soil sample PA-AC07(0-6)-121912 collected from 0 to 6 inches bgs
			SANDY SILT FILL - Black and ora dry, trace slag SILT FILL - Black, medium firm, m trace glass and wood chips			50%	
-			End of boring at 4.0 ft bgs.				
5- 							

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	١	Ne	eston Solutions, Inc. 750 E Bunker Ct				AY-15
			Vernon Hills, IL 60061				(Page 1 of 1)
	•	Pils	EPA Region V Contract: EP-S5-06-04 en Soil Site: Railroad/Alley cago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no Sena	Latitude : 41.85290762 Longitude : -87.6593215
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Feet	USCS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS
0-	FL		ASPHALT - Black, bituminous				
	SP		SANDY SILT FILL - Gray, brown, soft, dry, some subangular gravel,	well graded			Composite soil sample PA-AC08(0-6)-121912 collected from 0 to 6 inches bgs
	FL		SANDY SILT FILL - Black, moist, medium-grained subrounded grav trace wood chips As above	trace el, poorly graded,			
Mendoza\Report\Support	-						
02-21-2014 K:\EPA\EPA\EPA R5 START3\Site Files\Pilsen SA - Mendoza\Report\Support\AY-15.bor 0 1			End of boring at 4.0 ft bgs.				



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	١		ston Solutions, Inc. 750 E Bunker Ct				AY-17	
		(Pilse	Vernon Hills, IL 60061 EPA Region V Contract: EP-S5-06-04 en Soil Site: Railroad/Alley cago, Cook County, Illinois	Drilling Company	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no Sena	(Page 1 of 1 Latitude : 41.852906 Longitude : -87.65914	684
			Sample Comments Investigative Soil Sample Investigative Soil Sample and		. 4.0 11			
Depth in Feet	USCS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (percent)	REMARKS	
0-	FL FL		ASPHALT - Black, bituminous SILTY SAND AND GRAVEL FILL brown, medium tight, dry, gravel is and angular	- Gray and light coarse-grained			Composite soil sample PA-AC09(0-6)-121912 collect inches bgs	ed from 0 to 6
1-	FL		SILT and SAND FILL - Black, meet trace sand and fine-grained angula graded, trace slag	lium firm, moist, ar gravel, poorly				
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	۷	Ve	ston Solutions, Inc. 750 E Bunker Ct	AY-18						
			Vernon Hills, IL 60061				(Page 1 of 1)			
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19/2012 : Geoprobe : Cabeno : David Sena : 4.0 ft bgs		Latitude : 41.85287599 Longitude : -87.65905847			
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Feet	NSCS	GRAPHIC	DESCRIPTIC	ON	Sample	Recovery (percent)	REMARKS			
0-	FL		ASPHALT - Black, bituminous		IN /					
-	-		SANDY SILT FILL - Black, brown, dry, some fine-grained angular gra	and gray, soft, avel, well graded			Composite soil sample PA-AC09(0-6)-121912 collected from 0 to 6 inches bgs			
- - - - - - -	FL						Grab soil sample PA-AY18(12-24)-121912 collected from 12 to 24			
2-	-		SILT FILL - Black, medium firm, m some clay, trace slag	ioist, some sand,		60%	inches bgs			
3-	FL									
	-		As above							
4-			End of boring at 4.0 ft bgs							
-	-									
5-	-									
6-										

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	٧	Ve	ston Solutions, Inc. 750 E Bunker Ct				AY-19
		`	Vernon Hills, IL 60061				(Page 1 of 1)
		Pilse	EPA Region V Contract: EP-S5-06-04 en Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no I Sena	Latitude : 41.85290902 Longitude : -87.65897612
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Feet	nscs	GRAPHIC	DESCRIPTIO	N	Sample	Recovery (percent)	REMARKS
0	FL		ASPHALT - Black, bituminous SILTY SAND AND GRAVEL FILL loose, dry, gravel is angular, well g	- Black and gray, graded			Composite soil sample PA-AC10(0-6)-121912 collected from 0 to 6 inches bgs
- - - 1-	FL		SILT FILL - Black, medium soft, di	ry, some sand			
			some glass, trace fine-grained sut	prounded gravel			Grab soil sample PA-AY19(12-24)-121912 collected from 12 to 24 inches bgs
2	FL					75%	
3-			SILT FILL - Olive-black, medium f	irm. moist. some			
	FL		clay, some wood chips				
4-	-		End of boring at 4.0 ft bgs				
6-							

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	١	Ne	ston Solutions, Inc. 750 E Bunker Ct				AY-20
			Vernon Hills, IL 60061				(Page 1 of 1)
		Pilse	EPA Region V Contract: EP-S5-06-04 en Soil Site: Railroad/Alley cago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 12/19 : Geop : Cabe : David : 4.0 ft	robe no Sena	Latitude : 41.85289844 Longitude : -87.65889205
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Feet	NSCS	GRAPHIC	DESCRIPTIC	N	Sample	Recovery (percent)	REMARKS
0-	FL		ASPHALT - Black, bituminous		IN /		
	- FL		SILTY SAND AND GRAVEL FILL loose, dry, gravel is medium-grain well graded	- Black and brown, ed and angular,			Composite soil sample PA-AC10(0-6)-121912 collected from 0 to 6 inches bgs
1- 	FL		SILT FILL - Black, medium firm, di some wood chips	ry, some sand,		75%	
endoza\Report\Support\AY-20.	FL		CLAY FILL - Olive-black, medium sand, some wood chips	firm, moist, some			
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	V	Ves	ston Solutions, Inc. 750 E Bunker Ct				RR-01
		\	/ernon Hills, IL 60061				(Page 1 of 1)
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: David	robe FIELDS	Latitude : 41.85375185 Longitude : -87.66167312
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Inches	S	GRAPHIC	DESCRIPTIO	N	Sample	Recovery (%)	REMARKS
0- 2- - - - - - - - - - - - - - - - - -			SANDY SILT with GRAVEL FILL - well graded, moist, coarse angular subangular cobble	r gravel, trace		75%	Collected composite soil sample PA-RR01,02(0-6)-050613
			well graded, medium angular grav subangular cobble, moist As above	el, trace			Collected composite soil sample PA-RR01,02(6-24)-050613 and PA-RR01,02(6-24)-050613D
24	•	<u>nainailí</u>	End of boring at 24 inches bgs.		11////	1	1
26-	-						

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	Weston Solutions, Inc. 750 E Bunker Ct Vernon Hills, IL 60061						RR-02
		١	/ernon Hills, IL 60061				(Page 1 of 1)
	F	Pilse	EPA Region V Contract: EP-S5-06-04 In Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: David	robe FIELDS	Latitude : 41.85379877 Longitude : -87.66146166
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Inches	S	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS
0- 2- 4-	FL		SANDY SILT with GRAVEL FILL - graded, moist, coarse angular gra				Collected composite soil sample PA-RR01,02(0-6)-050613
6- 	FL		SANDY SILT and GRAVEL FILL - gray, moist, gravel is medium-grai subangular, trace subangular cobl	ned and			
	- - - - - - - - - - - - - - - - - - -		SILTY SAND and GRAVEL FILL - gravel is medium-grained and ang well graded	Dark brown, moist, jular, trace slag,		90%	Collected composite soil sample PA-RR01,02(6-24)-050613 and PA-RR01,02(6-24)-050613D
20-							
24-			End of boring at 24 inches bgs.				
26-	26-						

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	V	Ves	ston Solutions, Inc. 750 E Bunker Ct				RR-03	
		١	/ernon Hills, IL 60061				(Page 1 of 1)	
	F	Pilse	EPA Region V Contract: EP-S5-06-04 n Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: David	robe FIELDS	Latitude : 41.85368266 Longitude : -87.66136832	
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample				
Depth in Inches	SS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS	
0- 	FL		SILTY SAND and CLAY FILL - Bro moist, poorly graded, trace medius gravel.					
6			SAND FILL - Brownish black, mois trace angular cobble	st, poorly graded,				
10-	FL							
12-			SILTY SAND and GRAVEL FILL - moist, gravel is coarse-grained an	Brown and black, d angular		90%		
16-								
	FL							
20								
24-		rode (i	End of boring at 24 inches bgs.		1	I		

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	۷	Ves	ston Solutions, Inc. 750 E Bunker Ct					RR-04
		١	/ernon Hills, IL 60061					(Page 1 of 1)
		Pilse	EPA Region V contract: EP-S5-06-04 n Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: EP. : Dav	eopro PA FIE Ivid S	be ELDS	Latitude : 41.85358088 Longitude : -87.66102496
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample				
Depth in Inches	NSCS	GRAPHIC	DESCRIPTIO	ON	Sample		Recovery (%)	REMARKS
02-21-2014 K./EPAIEPA R5 START3/Site Files/Pilsen SA - Mendoza/Report/Support/RR-04.bor			SILYT SAND FILL - Brownish blac graded, some medium-grained an subangular cobble, well graded	gular gravel, trace			75%	Composite soil sample PA-RR04,06(0-6)-050613 collected
-24 K:/		<u>paraditi</u>	End of boring at 24 inches bgs.			11_		
-12-20	-							

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		V	Ves	ston Solutions, Inc. 750 E Bunker Ct				RR-05	
			V	/ernon Hills, IL 60061				(Page 1 of 1)	
		F	Pilse	EPA Region V contract: EP-S5-06-04 n Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: David	robe FIELDS	Latitude : 41.8535065 Longitude : -87.66102961	
			~	Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample				
	Depth in nches	nscs	GRAPHIC	DESCRIPTIO	N	Sample	Recovery (%)	REMARKS	
02-21-2014 K:\EPA\EPA R5 START3\Site Files\Pilsen SA - Mendoza\Report\Support\RR-05.bor	0	FL		SILT FILL - Light brown and black some clay, trace medium-grained	gravel		100%		
02-21-2(26-								

	V	Ves	ton Solutions, Inc. 750 E Bunker Ct				RR-07
		١	/ernon Hills, IL 60061				(Page 1 of 1)
	F	Pilse	EPA Region V contract: EP-S5-06-04 n Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: David	robe FIELDS	Latitude : 41.85337526 Longitude : -87.66068324
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Inches	SS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS
0 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -			SILT FILL - Grayish black, dry, so angular gravel, well graded SILTY SAND FILL - Grayish black coarse-grained angular gravel, we As above with some clay, moist	, dry, some		80%	Composite soil sample PA-RR07,08(0-6)-050613 collected
24-			End of boring at 24 inches bgs.				
26-			o				

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	Weston Solutions, Inc. 750 E Bunker Ct						RR-07
		١	/ernon Hills, IL 60061				(Page 1 of 1)
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois		n Soil Site: Railroad/Alley	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 5/6/2013 : Geoprobe : EPA FIELDS : David Sena : 24 inches bgs		Latitude : 41.85337526 Longitude : -87.66068324
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Inches	SS	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS
0			SILT FILL - Grayish black, dry, so angular gravel, well graded SILTY SAND FILL - Grayish black coarse-grained angular gravel, we As above with some clay, moist	, dry, some		80%	Composite soil sample PA-RR07,08(0-6)-050613 collected from 0-6 inches bgs
24-			End of boring at 24 inches bgs.				
26-							

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	V	Ves	ston Solutions, Inc. 750 E Bunker Ct	RR-08						
		١	/ernon Hills, IL 60061				(Page 1 of 1)			
	F	Pilse	EPA Region V Contract: EP-S5-06-04 en Soil Site: Railroad/Alley ago, Cook County, Illinois	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 5/6/2013 : Geoprobe : EPA FIELDS : David Sena : 12 inches bgs		Latitude : 41.85339068 Longitude : -87.66058543			
			Sample Comments Investigative Soil Sample Investigative Soil Sample and							
Depth in Inches	USCS	GRAPHIC	DESCRIPTIO	DN	Sample	Recovery (%)	REMARKS			
0- 2- 2- 4- 6- 8-			SANDY SILT FILL - Grayish black fine-grained subangular gravel, po As above with trace gravel, moist	, dry, some orly graded			Composite soil sample PA-RR07,08(0-6)-050613 collected from 0 to 6 inches bgs			
10- 							from 6 to 24 inches bgs (only 6-12 inch aliquot from RR-08 composited into sample)			
	-		End of boring at 12 inches bgs - R	efusal, concrete						
14-										
16-										
18-										
20-										
22-										
24-										
26-										

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		V		ston Solutions, Inc. 750 E Bunker Ct	RR-09					
·		ŀ	C Pilse	/ernon Hills, IL 60061 EPA Region V Contract: EP-S5-06-04 on Soil Site: Railroad/Alley ago, Cook County, Illinois	Drilling Company	: David	robe FIELDS	(Page 1 of 1) Latitude : 41.85328826 Longitude : -87.6605890		
	Depth in Inches	S	GRAPHIC	Sample Comments Sample Comments Investigative Soil Sample DESCRIPTIO	Duplicate Sample	Sample	Recovery (%)	REMARKS		
	0	FL	G	SANDY SILT FILL - Brown, dry to fine-grained angular gravel, well g End of boring at 6 inches bgs - Re	moist, some raded	Š				
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	Weston Solutions, Inc. 750 E Bunker Ct						RR-10
		١	/ernon Hills, IL 60061				(Page 1 of 1)
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois		contract: EP-S5-06-04 n Soil Site: Railroad/Alley	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 5/6/2013 : Geoprobe : EPA FIELDS : David Sena : 24 inches bgs		Latitude : 41.85319629 Longitude : -87.66074237
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Inches	S	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS
0	FL		SILTY SAND and GRAVEL FILL - coarse-graubed subrounded grave As above, gravel is fine-grained an	el, well graded			Composite soil sample PA-RR10,12(0-6)-050613 collected from 0-6 inches bgs
	FL		SILTY SAND FILL - Grayish black dry, some fine-grained angular gra graded	and light brown, avel, poorly		90%	Composite soil sample PA-RR10,12(6-24)-050613 collected from 6-24 inches bgs
24		nd Ale	End of boring at 24 inches bgs.				
26-							

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	Weston Solutions, Inc. 750 E Bunker Ct						RR-11
		١	/ernon Hills, IL 60061				(Page 1 of 1)
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: Davio	orobe FIELDS	Latitude : 41.85307914 Longitude : -87.66059136
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Inches	S	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS
0	FL		SANDY SILT FILL - Brown, dry, so subangular gravel, poorly graded As above but brownish gray SILTY SAND and GRAVEL - Brow fine-grained angular, poorly grade As above	vnish black, moist,		90%	Composite soil sample PA-RR11,13(0-6)-050613 collected from 0-6 inches bgs
24-			End of boring at 24 inches bgs.		11		
26-							

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	Weston Solutions, Inc. 750 E Bunker Ct						RR-12
	Vernon Hills, IL 60061						(Page 1 of 1)
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: David	robe FIELDS	Latitude : 41.8529755 Longitude : -87.66068943
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Inches	လ္လ	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS
0- 			SILTY SAND and GRAVEL FILL - dry to moist, fine-grained angular sub-angular cobble, well graded	Brownish black, gravel, trace			Composite soil sample PA-RR10,12(0-6)-050613 collected from 0-6 inches bgs
			As above with trace cinders SILTY GRAVEL FILL - Brownish to red, moist, trace sand, medium-gra gravel, well graded	olack, gray, and ained subangular		100%	Composite soil sample PA-RR10,12(6-24)-050613 collected from 6-24 inches bgs
22-			End of boring at 24 inches bgs.				
26-	-						

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	Weston Solutions, Inc. 750 E Bunker Ct						RR-13
		١	/ernon Hills, IL 60061				(Page 1 of 1)
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois		Contract: EP-S5-06-04	Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: 5/6/2013 : Geoprobe : EPA FIELDS : David Sena : 24 inches bgs		Latitude : 41.85292473 Longitude : -87.6605555
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depth in Inches	S	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS
0- 2- 4-		ین از میکند. این کاریک میکند. از میکند از میکند. این کاریک میکند. این کاریک میکند. از میکند از میکند. از میکند ماهم از میکند میکند از میکند. از میکند میکند از میکند از میکند. از میکند از میکند از میکند از میکند. از میکند میکند میکند میکند. از میکند میکند میکند. از میکند از میکند میکند. از میکند میکند میکند. از میکند میکند. از میکن	SILTY SAND and GRAVEL FILL - moist, fine-grained angular gravel, As above with trace brick pieces	Grayish black, poorly graded			Composite soil sample PA-RR11,13(0-6)-050613 collected from 0-6 inches bgs
			SILTY SAND and GRAVEL FILL - coarse-grained subangular gravel	Black, moist, , poorly graded		100%	Composite soil sample PA-RR11,13(6-24)-050613 collected from 6-24 inches bgs
20- 22- 24- 26-		ان از این از این از این از این از این از	End of boring at 24 inches bgs.				

02-21-2014 K:\EPA\EPA R5 START3\Site Files\Pilsen SA - Mendoza\Report\Support\RR-13.br

	Ņ	Ne	ston Solutions, Inc. 750 E Bunker Ct				RR-14
			Vernon Hills, IL 60061				(Page 1 of 1)
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: Davi		Latitude : 41.85284411 Longitude : -87.66066196
			Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample			
Depti in Inche	လု	GRAPHIC	DESCRIPTIO	ON	Sample	Recovery (%)	REMARKS
0. 2. 2. 4. 4. 4. 4. 6. 10. 12. 14. 14. 14. 14. 14. 14. 14. 14			SILTY SAND FILL - Grayish black medium-grained subangular grave As above with trace brick pieces SILTY SAND and GRAVEL FILL - coarse-grained subangular gravel. As above	el, well graded		100%	Composite soil sample PA-RR14,15,16(0-6)-050613 collected from 0-6 inches bgs
-1-2014 K:\E	-		End of boring at 24 inches bgs.				1
²⁻²⁰	-						

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EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois Date Drilling Type Chicago, Cook County, Illinois Latitude : 41.8527559 Uniting Company Total Depth in a Depth in cost and the state state state state state of the state state state state state state state investigative Soil Sample Date Drilling Company Total Depth in a Depth in cost and the state state of the state state state state state state investigative Soil Sample and Duplicate Sample Date Depth in cost and the state state state investigative Soil Sample and Duplicate Sample Depth in cost soil Sample Comments Depth in cost soil Sample Sample DESCRIPTION DESCRIPTION Billinois Billinois Billinois REMARKS 0 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			V		ston Solutions, Inc. 750 E Bunker Ct					RR-15	
Contract: EP-S5:06-04 Drill Rig Type : Hand Auger Longitude : -87.66062628 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois Drill Rig Type : Hand Auger Longitude : -87.66062628 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois Drill Rig Type : Hand Auger Longitude : -87.66062628 Politing Company Weston Solutions, Inc. Weston Solutions, Inc. Weston Solutions, Inc. Veston Solutions Drill Rig Type : 4 Inches bgs Image: Sign Sign Sign Sign Sign Sign Sign Sign					Vernon Hills, IL 60061					(Page 1 of 1)	
Depth O O Investigative Soil Sample Investigative Soil Sample Depth O Investigative Soil Sample O Depth O Investigative Soil Sample O Investigating Sample O			Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Drill Rig Type Drilling Company Weston Geoscientist	Drill Rig Type : Hand Auger Longitude : -87.6606 Drilling Company : Weston Solutions, Inc. : Weston Geoscientist : David Sena				
0 SANDY SILT FILL - Brownish black, dry, some fine-grained subangular gravel, poorly graded 2 4 4 6 6 FL As above 100%					Investigative Soil Sample	Duplicate Sample					
1 SANDY SILT FILL - Brownish black, dry, some fine-grained subangular gravel, poorly graded 2		in nches	NSCS	GRAPHIC	DESCRIPTIO	ON	Sample		Recovery (%)	REMARKS	
24 End of boring at 24 inches bgs	EPA\EPA R5 START3\Site Files\Pilsen SA - Mendoza\Report\Support\RR-15.bor				SANDY SILT FILL - Brownish blac fine-grained subangular gravel, po As above SILTY SAND FILL - Blackish brow little medium-grained angular grav	n, dry to moist,				from 0-6 inches bgs Composite soil sample PA-RR14,15,16(6-24)-050613 collected	
8 26	02-21-2014 K:\	-	-	1010	End of boring at 24 inches bgs		11	_11			

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	Weston Solutions, Inc. 750 E Bunker Ct Vernon Hills, IL 60061			RR-16 (Page 1 of 1)						
	EPA Region V Contract: EP-S5-06-04 Pilsen Soil Site: Railroad/Alley Chicago, Cook County, Illinois			Date Drill Rig Type Drilling Company Weston Geoscientist Total Depth	: David	Auger on Solutio	Latitude Longitude ons, Inc.	: 41.85264936 : -87.66057892		
		0	Sample Comments Investigative Soil Sample Investigative Soil Sample and	Duplicate Sample						
Depth in Inches	USCS	GRAPHIC	DESCRIPTIO	NC	Sample	Recovery (%)	REMA	RKS		
0	FL	A. S. M. S. M S. M. S. MN S. M. S. M. S	SANDY SILT and GRAVEL FILL - gravel is fine-grained and angular,	, poorly graded		100%	Composite soil sample PA-RR14,1 0-6 inches bgs	5,16(0-6)-050613 collected from		
	FL	하는 것은 하는 것은 것을 하는 것을 하는 것을 수 있는 것을 수 있다. 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	SILTY SAND FILL - Reddish brow moist, some medium-grained ang graded	m and black, dry to ular gravel, well		100 %	Composite soil sample PA-RR14,1 from 6-24 inches bgs (only 6-12 inc			
роц/RR-16. 			End of boring at 12 inches bgs - R	efusal, concrete	11 1					
- SA - Mendoz										
te Files/Pilsen - 81 180 - 81										
R5 START3/SI 										
02-21-2014 K/EPALEPA R5 START3/Site Files/Pilsen SA - Mendoza/Report/RR-16.bor 7										
24-										

APPENDIX C LABORATORY ANALYTICAL REPORTS AND DATA VALIDATION REPORTS

PILSEN AREA SOIL SITE CHICAGO, ILLINOIS DATA VALIDATION REPORT

Date: January 14, 2013
 Laboratory: STAT Analysis Corporation (STAT), Chicago, Illinois
 Laboratory Project #: 12120653
 Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON[®]) Superfund Technical Assessment and Response Team (START)
 WESTON Work Order #: 20405.012.001.2038.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 23 soil samples collected for the Pilsen Area Soil Site that were analyzed for the following parameters and U.S. Environmental Protection Agency (U.S. EPA) methods:

- Total Metals by SW-846 Methods 6020 and 7471A
- Coarse and Fine Grained Lead by SW-846 Method 6020
- Lead Bioaccessibility Assay by Method 9200 and SW-846 Method 6020
- Toxicity Characteristic Leaching Procedure (TCLP) Metals by SW-846 Methods 1311, 6020, and 7470A
- pH by SW-846 Method 9045C
- Percent Moisture by ASTM D2974

A level II data package was requested from STAT. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review" dated January 2010. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

TOTAL METALS BY U.S. EPA SW-846 METHODS 6020 AND 7471A

1. <u>Samples</u>

The following table summarizes the samples for which this data validation is being conducted.

			Date	
Samples	Lab ID	Matrix	Collected	Date Analyzed
PA-AC05(0-6)-121912	12120653-001	Soil	12/19/2012	12/28/2012 - 1/2/2013
PA-AC06(0-6)-121912	12120653-002	Soil	12/19/2012	12/28/2012 - 12/31/2012
PA-AY09(12-24)-121912	12120653-003	Soil	12/19/2012	12/29/2012 - 1/8/2013
PA-AY12(6-12)-121912	12120653-004	Soil	12/19/2012	12/29/2012 - 1/8/2013
PA-AY13(12-24)-121912	12120653-005	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AC07(0-6)-121912	12120653-006	Soil	12/19/2012	12/28/2012 - 12/31/2012
PA-AC08(0-6)-121912	12120653-007	Soil	12/19/2012	12/28/2012 - 12/31/2012

Data Validation Report Pilsen Area Soil Site STAT Analysis Corporation Laboratory Project #: 12120653

			Date	
Samples	Lab ID	Matrix	Collected	Date Analyzed
PA-AC09(0-6)-121912	12120653-008	Soil	12/19/2012	12/28/2012 - 12/31/2012
PA-AC10(0-6)-121912	12120653-009	Soil	12/19/2012	12/28/2012 - 12/31/2012
PA-AC01(0-6)-121912	12120653-010	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AC01(0-6)-121912D	12120653-011	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AC02(0-6)-121912	12120653-012	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AC02(0-6)-121912D	12120653-013	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AY02(6-12)-121912	12120653-014	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AY04(6-12)-121912	12120653-015	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AY16(12-24)-121912	12120653-016	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AY18(6-12)-121912	12120653-017	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AY19(12-24)-121912	12120653-018	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AY05(6-12)-121912	12120653-019	Soil	12/19/2012	12/29/2012 - 1/8/2013
PA-AY07(12-24)-121912	12120653-020	Soil	12/19/2012	12/29/2012 - 1/2/2013
PA-AC03(0-6)-121912	12120653-021	Soil	12/19/2012	12/29/2012 - 1/8/2013
PA-AC04(0-6)-121912	12120653-022	Soil	12/19/2012	12/28/2012 - 12/31/2012
PA-AC03HS(0-6)-121912	12120653-023	Soil	12/19/2012	12/28/2012 - 12/31/2012

2. Holding Times

The samples were analyzed within the required holding time limit of 28 says from sample collection to analysis for mercury and 180 days from sample collection to analysis for all other metals.

3. <u>Blank Results</u>

Method blanks were analyzed with the metals analyses. There was some minor contamination below the reporting limits and one detection above the reporting limit in the blanks. However, the sample results were much greater than the blank concentrations and no qualifications were required.

4. <u>Laboratory Control Sample (LCS) Results</u>

The LCS recoveries were within the quality control (QC) limits except for as follows. Tin and antimony were detected high in one or more of the LCSs analyzed. Detected tin and antimony results in the samples that correspond with the LCSs outside QC limits were flagged "J" as estimated.

Data Validation Report Pilsen Area Soil Site STAT Analysis Corporation Laboratory Project #: 12120653

5. <u>Matrix Spike (MS) and MS Duplicate (MSD) Results</u>

STAT analyzed site specific MS/MSD samples. The percent recoveries and relative percent differences (RPD) were within QC limits except for as follows.

In some instances, the recoveries were poor due to the spike amount being much lower than the sample concentrations. No qualifications are required in these instances.

In the spike of sample PA-AY05(6-12)-121912, the following compounds were detected high: arsenic and chromium. In sample PA-AY05(6-12)-121912, detected results for arsenic and chromium were flagged "J" as estimated due to potential matrix interference.

In the spike of sample PA-AC03(0-6)-121912, the following compounds were detected high: arsenic and silver. In sample PA-AC03(0-6)-121912, detected results for arsenic and selenium were flagged "J" as estimated due to potential matrix interference.

6. Field Duplicate Results

There are two field duplicates identified with a "D" suffix in the sample identification. RPDs were calculated for detected metals. The RPDs ranged from 0 to 67 percent. Only one RPD was above a standard QC limit of 50 for chromium in sample PA-AC02(0-6)-121912D. In general, field duplicate results were acceptable and there was little heterogeneity associated with metals, other than chromium.

7. Overall Assessment

The metals data are acceptable for use as qualified based on the information received.

COARSE AND FINE GRAINED LEAD BY U.S. EPA SW-846 METHOD 6020 AND LEAD BIOACCESSIBILITY ASSAY BY METHODS 9200 AND 6020

1. <u>Samples</u>

The following table summarizes the samples for which this data validation is being conducted.

			Date	
Samples	Lab ID	Matrix	Collected	Date Analyzed
PA-AC05(0-6)-121912	12120653-001	Soil	12/19/2012	1/4/2013 - 1/8/2013
PA-AC06(0-6)-121912	12120653-002	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AY09(12-24)-121912	12120653-003	Soil	12/19/2012	1/3/2013 - 1/7/2013
PA-AY12(6-12)-121912	12120653-004	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AY13(12-24)-121912	12120653-005	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AC07(0-6)-121912	12120653-006	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AC08(0-6)-121912	12120653-007	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AC09(0-6)-121912	12120653-008	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AC10(0-6)-121912	12120653-009	Soil	12/19/2012	1/4/2013 - 1/7/2013
PA-AC01(0-6)-121912	12120653-010	Soil	12/19/2012	1/4/2013
PA-AC01(0-6)-121912D	12120653-011	Soil	12/19/2012	1/4/2013 - 1/7/2013
PA-AC02(0-6)-121912	12120653-012	Soil	12/19/2012	1/4/2013 - 1/7/2013
PA-AC02(0-6)-121912D	12120653-013	Soil	12/19/2012	1/4/2013 - 1/7/2013
PA-AY02(6-12)-121912	12120653-014	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AY04(6-12)-121912	12120653-015	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AY16(12-24)-121912	12120653-016	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AY18(6-12)-121912	12120653-017	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AY19(12-24)-121912	12120653-018	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AY05(6-12)-121912	12120653-019	Soil	12/19/2012	1/3/2013 - 1/4/2013
PA-AY07(12-24)-121912	12120653-020	Soil	12/19/2012	1/3/2013
PA-AC03(0-6)-121912	12120653-021	Soil	12/19/2012	1/3/2013
PA-AC04(0-6)-121912	12120653-022	Soil	12/19/2012	1/3/2013
PA-AC03HS(0-6)-121912	12120653-023	Soil	12/19/2012	1/3/2013

2. Holding Times

The samples were analyzed within the required holding time limit of 180 days from sample collection to analysis.

Data Validation Report Pilsen Area Soil Site STAT Analysis Corporation Laboratory Project #: 12120653

3. Blank Results

Method blanks were analyzed with the metals analyses. The blanks were free of lead contamination above the reporting limits. There were some detections of lead below the reporting limits; however, the sample results were much greater and no qualifications were required.

4. LCS Results

The LCS recoveries were within the QC limits.

5. <u>MS and MSD Results</u>

EA Group analyzed site specific MS/MSDs; however, the recoveries were poor due to the spike amount being much lower than the sample concentrations. No qualifications are required in these instances.

6. <u>Field Duplicate Results</u>

There are two field duplicates identified with a "D" suffix in the sample identification. RPDs were calculated for detected metals. The RPDs ranged from 0 to 84 percent. Only one RPD was above a standard QC limit of 50 for coarse lead in sample PA-AC02(0-6)-121912D. In general, field duplicate results were acceptable and there was little heterogeneity associated with metals, other than coarse lead in sample PA-AC02(0-6)-121912 and its duplicate.

7. Overall Assessment

The lead data are acceptable for use as qualified based on the information received.

TCLP METALS BY U.S. EPA SW-846 METHODS 1311, 6020, AND 7470A

1. <u>Samples</u>

The following table summarizes the samples for which this data validation is being conducted.

			Date	
Samples	Lab ID	Matrix	Collected	Date Analyzed
PA-AY05(6-12)-121912	12120653-019	Soil	12/19/2012	12/31/2012 - 1/2/2013
PA-AC03(0-6)-121912	12120653-021	Soil	12/19/2012	12/31/2012 - 1/2/2013
PA-AC04(0-6)-121912	12120653-022	Soil	12/19/2012	12/31/2012 - 1/2/2013
PA-AC03HS(0-6)-121912	12120653-023	Soil	12/19/2012	12/31/2012 - 1/2/2013

2. <u>Holding Times</u>

The samples were analyzed within the required holding time limit of 28 says from sample collection to analysis for mercury and 180 days from sample collection to analysis for all other metals.

3. Blank Results

Method blanks were analyzed with the metals analyses. The blanks were free of lead contamination above the reporting limits. Some metals were detected below the reporting limit; however, the sample results were much greater or non-detect and no qualifications were applied.

4. LCS Results

The LCS recoveries were within the QC limits.

5. <u>MS and MSD Results</u>

STAT analyzed a site specific MS and MSD. The percent recoveries and RPDs were within QC limits except for as follows. Lead had poor recovery; however, the recoveries were poor due to the spike amount being much lower than the sample concentrations. No qualifications are required in this instance.

6. **Overall Assessment**

The TCLP metals data are acceptable for use based on the information received.

GENERAL CHEMISTRY PARAMETERS (pH by SW-846 Method 9045D and Percent Moisture by ASTM D2974)

1. <u>Samples</u>

The following table summarizes the samples for which this data validation is being conducted.

			Date	
Samples	Lab ID	Matrix	Collected	Date Analyzed
PA-AC05(0-6)-121912	12120653-001	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC06(0-6)-121912	12120653-002	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY09(12-24)-121912	12120653-003	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY12(6-12)-121912	12120653-004	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY13(12-24)-121912	12120653-005	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC07(0-6)-121912	12120653-006	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC08(0-6)-121912	12120653-007	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC09(0-6)-121912	12120653-008	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC10(0-6)-121912	12120653-009	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC01(0-6)-121912	12120653-010	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC01(0-6)-121912D	12120653-011	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC02(0-6)-121912	12120653-012	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC02(0-6)-121912D	12120653-013	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY02(6-12)-121912	12120653-014	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY04(6-12)-121912	12120653-015	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY16(12-24)-121912	12120653-016	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY18(6-12)-121912	12120653-017	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY19(12-24)-121912	12120653-018	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY05(6-12)-121912	12120653-019	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AY07(12-24)-121912	12120653-020	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC03(0-6)-121912	12120653-021	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC04(0-6)-121912	12120653-022	Soil	12/19/2012	12/28/2012 - 12/29/2012
PA-AC03HS(0-6)-121912	12120653-023	Soil	12/19/2012	12/28/2012 - 12/29/2012

2. <u>Holding Times</u>

The holding times were acceptable.

Data Validation Report Pilsen Area Soil Site STAT Analysis Corporation Laboratory Project #: 12120653

3. Blank Results

Method blanks were analyzed with the moisture analyses. The blanks were free of target analyte contamination above the reporting limits.

4. LCS Results

An LCS was analyzed with the moisture analyses. The LCS recovery was within the laboratoryestablished QC limits.

5. <u>Laboratory Duplicate Results</u>

Laboratory duplicates were analyzed with the moisture and pH analyses. The RPDs were within the QC limits.

6. <u>Field Duplicate Results</u>

The RPDs for field duplicate result was less than a standard QC limit of 50 percent which is acceptable.

7. **Overall Assessment**

The general chemistry parameters are acceptable for use based on the information received.

Data Validation Report Pilsen Area Soil Site STAT Analysis Corporation Laboratory Project #: 12120653

ATTACHMENT

STAT ANALYSIS CORPORATION RESULTS SUMMARY WITH QUALIFIERS



STAT Analysis Corporation

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

			_		t thit but	c. January	, 05, 20	15
Client: Lab Order: Project: Lab ID:	Weston Solutions 12120653 20405.012.008.2038.00 12120653-001A	Client Sample ID: PA-AC05(0-6)-121912 Tag Number: 8.00, Pilsen Soil, SA, Pilsen Collection Date: 12/19/2012 12:10:00 PM Matrix: Soil						
Analyses	12120000 00111	Result	RL	Qualifier		DF	D	ate Analyzed
Mercury		SW7471/	4		Prep	Date: 12/2	28/2012	Analyst: LB
Mercury		0.55	0.022		mg/Kg-dry	1		1/2/2013
Metals by ICP/N	IS	SW6020	(SW30	50B)	Prep	Date: 12/2	28/2012	Analyst: JG
Antimony		29 J	24		mg/Kg-dry	100		12/31/2012
Arsenic		14	2.4		mg/Kg-dry	20		12/28/2012
Barium		540	2.4		mg/Kg-dry	20		12/28/2012
Cadmium		25	1.2		mg/Kg-dry	20		12/28/2012
Chromium		110	2.4		mg/Kg-dry	20		12/28/2012
Copper		5700	60		mg/Kg-dry	200		12/29/2012
Lead		3900	4.8		mg/Kg-dry	20		12/28/2012
Selenium		3.4	2.4		mg/Kg-dry	20		12/28/2012
Silver		5.6	2.4		mg/Kg-dry	20		12/28/2012
Tin		480 J	24	*	mg/Kg-dry	20		12/28/2012
Zinc		13000	120		mg/Kg-dry	200		12/29/2012
pH (25 °C)		SW90450	5		Prep	Date: 12/2	8/2012	Analyst: RW
pН		7.6			pH Units	1		12/28/2012
Percent Moistu	re	D2974			Prep	Date: 12/2	8/2012	Analyst: RW
Percent Moisture		16.0	0.2		wt%	1		12/29/2012

21/14/2013

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

STAT Analysis Corporation

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2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	ample I	D: PA-AC05(0	-6)-121912
Lab Order:	12120653					r: Fine Graine	
Project:	20405.012.008.2038.00,	Pilsen Soil, S	A, Pilser	Collec	tion Da	te: 12/19/2012	12:10:00 PM
Lab ID:	12120653-001B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	200/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG
Lead		26	0.025		mg/L	5	1/8/2013
Metals by ICP/	MS	SW602	0 (SW30	50B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		3600	18	n	ng/Kg-dry	100	1/8/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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> Report Date: January 09, 2013 Print Date: January 09, 2013

	08.2038.00, Pilsen Soil, S	SA, Pilser			r: Course Grai	
		A, Pilser	Collec	stion Det	10/10/0010	12 februaries and and
Lab ID: 12120653-0				cuon Da	ce: 12/19/2012	12:10:00 PM
11RD 11. 12120055-0	01C			Matri	x: Soil	
Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter
 - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions						06(0-6)-121912
Lab Order:	12120653			Ta	g Numbe	r:	
Project:	20405.012.008.2038.00), Pilsen Soil, SA	, Pilser	Colle	ction Da	te: 12/19/20	012 12:15:00 PM
Lab ID:	12120653-002A			-	Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW7471/	4		Prep	Date: 12/28	2012 Analyst: LB
Mercury		0.35	0.021	4	mg/Kg-dry	1	12/28/2012
Metals by ICP/MS		SW6020	(SW30	50B)	Prep	Date: 12/28	1/2012 Analyst: JG
Antimony		130 J	19	- C - C	mg/Kg-dry	100	12/31/2012
Arsenic		10	1.9	- 3	mg/Kg-dry	20	12/28/2012
Barium		320	1.9		mg/Kg-dry	20	12/28/2012
Cadmium		18	0.96		mg/Kg-dry	20	12/28/2012
Chromium		53	1.9		mg/Kg-dry	20	12/28/2012
Copper		1900	48		mg/Kg-dry	200	12/29/2012
Lead		3000	3.8		mg/Kg-dry	20	12/28/2012
Selenium		2.5	1.9		mg/Kg-dry	20	12/28/2012
Silver		2.8	1.9		mg/Kg-dry	20	12/28/2012
Tin		1600 J	19	* 1	mg/Kg-dry	20	12/28/2012
Zinc		5300	96	1	mg/Kg-dry	200	12/29/2012
pH (25 °C)		SW90450	0		Prep	Date: 12/28	/2012 Analyst: RW
pН		7.7			pH Units	1	12/28/2012
Percent Moisture		D2974			Prep	Date: 12/28	/2012 Analyst: RW
Percent Moisture		11.7	0.2		wt%	1	12/29/2012

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- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

							1.		
Client:	Weston Solutions			Client S	Client Sample ID: PA-AC06(0-6)-121912				
Lab Order:	12120653			Ta	Tag Number: Fine Grained				
Project:	20405.012.008.2038.00,	Pilsen Soil, S	A, Pilser	Collection Date: 12/19/2012 12:15:00 PM					
Lab ID:	12120653-002B				Matri	x: Soil			
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Bloaccessibilit	y Asay Metals by ICP/MS	EPA 9	200/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG		
Lead		18	0.025		mg/L	5	1/4/2013		
Metals by ICP/	MS	SW602	20 (SW30	050B)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		2100	4.8		ng/Kg-dry	100	1/3/2013		

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	Sample II	D: PA-AC06(0	-6)-121912
Lab Order:	12120653			Та	y Numbe	r: Course Grai	ined
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilse	a Colle	ction Da	te: 12/19/2012	12:15:00 PM
Lab ID:	12120653-002C	Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	()	SW602	0 (SW3		Prep ng/Kg-dry	Date: 1/3/2013	Analyst: JG

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

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Client: Lab Order:	Weston Solutions 12120653			Tag	g Numbe				
Project:	20405.012.008.2038.0	0, Pilsen Soil, SA	, Pilsen	Colle			12/19/2012 12:30:00 PM		
Lab ID:	12120653-003A				Matri	x: Soil			
Analyses		Result	RL	Qualifier	Units	DF 1	Date Analyzed		
Mercury		SW7471/	4		Prep	Date: 12/28/2012	Analyst: LB		
Mercury		2.6	0.2	r	ng/Kg-dry	10	1/2/2013		
Metals by ICP/MS	5	SW6020	(SW30	50B)	Prep	Date: 12/28/2012	Analyst: JG		
Antimony		640 J	26	r	ng/Kg-dry	100	12/31/2012		
Arsenic		39	2.6	r	ng/Kg-dry	20	12/29/2012		
Barium		2400	2.6	r	ng/Kg-dry	20	12/29/2012		
Cadmium		48	1.3	r	ng/Kg-dry	20	12/29/2012		
Chromium		110	26	r	ng/Kg-dry	200	12/29/2012		
Copper		8900	64	r	ng/Kg-dry	200	12/29/2012		
Lead		15000	52	r	ng/Kg-dry	200	12/29/2012		
Selenium		3.2	2.6	r	ng/Kg-dry	20	12/29/2012		
Silver		38	2.6	r	ng/Kg-dry	20	12/29/2012		
Tin		8200 5	64	* r	ng/Kg-dry	100	1/8/2013		
Zinc		7900	130	r	ng/Kg-dry	200	12/29/2012		
pH (25 °C)		SW90450	3		Prep	Date: 12/28/2012	Analyst: RW		
pН		7.4			pH Units	1	12/28/2012		
Percent Moisture	2	D2974			Prep	Date: 12/28/2012	Analyst: RW		
Percent Moisture		20.8	0.2		wt%	1	12/29/2012		

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Qualifiers:

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client Sample ID: PA-AY09(12-24)-121912					
Lab Order:	12120653			Таз	Tag Number: Fine Grained				
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilse	n Collection Date: 12/19/2012 12:30:00 PM					
Lab ID:	12120653-003B				Matri	x: Soil			
Analyses		Result	ŔĹ	Qualifier	Units	DF	Date Analyzed		
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG		
Lead		56	0.5		mg/L	100	1/7/2013		
Metals by ICP/I	MS	SW602	0 (SW3	050B)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		6600	5.3	1	ng/Kg-dry	100	1/3/2013		

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

	,,,,,							
Weston Solutions			Client S	Sample I	D: PA-AY09(12-24)-121912		
12120653			Tag	g Numbe	r: Course Gra	ined		
20405.012.008.2038.00,	Pilsen Soil, SA	A, Pilsen	Collec	ction Da	te: 12/19/2012	2 12:30:00 PM		
12120653-003C Matrix: Soil								
	Result	RL	Qualifier	Units	DF	Date Analyzed		
S			50B)	Prep				
	12120653 20405.012.008.2038.00,	12120653 20405.012.008.2038.00, Pilsen Soil, SA 12120653-003C Result S SW6020	12120653 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen 12120653-003C Result RL SW6020 (SW30	Weston Solutions Client S 12120653 Tag 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen College 12120653-003C Result RL Qualifier S SW6020 (SW3050B)	Weston SolutionsClient Sample II12120653Tag Number20405.012.008.2038.00, Pilsen Soil, SA, PilsenCollection Date12120653-003CMatriResultRL Qualifier UnitsSSW6020 (SW3050B)	12120653 Tag Number: Course Gra 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen Collection Date: 12/19/2012 12120653-003C Matrix: Soil Result RL Qualifier Units DF S SW6020 (SW3050B) Prep Date: 1/3/2013		

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client: Lab Order:	Weston Solutions 12120653				Sample I g Numbe	D: PA-AY12(6- r:	12)-121912		
Project:	20405.012.008.2038.00), Pilsen Soil, SA	, Pilsen	Collection Date: 12/19/2012 12:35:00 PM					
Lab ID:	12120653-004A				Matri	ix: Soil			
Analyses		Result	RL	Qualifier	Units	DF 1	Date Analyzed		
Mercury		SW7471/	A		Prep	Date: 12/28/2012	Analyst: LB		
Mercury		0.94	0.11	r	ng/Kg-dry	5	1/2/2013		
Metals by ICP/MS	3	SW6020	(SW30	50B)	Prep	Date: 12/28/2012	Analyst: JG		
Antimony		ND	26	n	ng/Kg-dry	100	12/31/2012		
Arsenic		15	2.6	n	ng/Kg-dry	20	12/29/2012		
Barium		420	2.6	n	ng/Kg-dry	20	12/29/2012		
Cadmium		18	1.3	n	ng/Kg-dry	20	12/29/2012		
Chromium		-35	2.6	n	ng/Kg-dry	20	12/29/2012		
Copper		2000	6.5	л	ng/Kg-dry	20	12/29/2012		
Lead		1700	5.2	п	ng/Kg-dry	20	12/29/2012		
Selenium		ND	2.6	л	ng/Kg-dry	20	12/29/2012		
Silver		2.6	2.6	0	ng/Kg-dry	20	12/29/2012		
Tin		420 J	65	* n	ng/Kg-dry	100	1/8/2013		
Zinc		3800	130	n	ng/Kg-dry	200	12/29/2012		
pH (25 °C)		SW90450	2		Prep	Date: 12/28/2012	Analyst: RW		
pН		7.7			pH Units	1	12/28/2012		
Percent Molsture	6 / C	D2974			Prep	Date: 12/28/2012	Analyst: RW		
Percent Moisture		14.6	0.2		wt%	1	12/29/2012		

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Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

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Client:	Weston Solutions			Client Sample ID: PA-AY12(6-12)-121912					
Lab Order:	12120653			Tag Number: Fine Grained					
Project:	20405.012.008.2038.00,	Pilsen Soil, S	A, Pilser	en Collection Date: 12/19/2012 12:35:00 PM					
Lab ID:	12120653-004B Matrix: Soil								
Analyses		Result	RL	Qualifier	Units	DF	Date Analyze		
Bioaccessibility	y Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG		
Lead		16	0.025		mg/L	5	1/4/2013		
Metals by ICP/I	MS	SW602	0 (SW30)50B)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		2000	5.1	n	ng/Kg-dry	100	1/3/2013		

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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> Report Date: January 09, 2013 Print Date: January 09, 2013

Metals by ICP/MS		SW6020	(SW30		Prep ng/Kg-dry	Date: 1/3/2013	Analyst: JG 1/4/2013
Analyses		Result	RL	Qualifier	Units	DF	Date Analyze
Lab ID:	12120653-004C		-	_	Matrix	: Soil	1
Project:	20405.012.008.2038.00,	Pilsen Soil, SA,	Pilser	Collec	ction Dat	e: 12/19/2012	12:35:00 PM
Lab Order:	12120653			Tag	g Number	: Course Grai	ined
Client:	Weston Solutions			Client S	Sample II): PA-AY12(6	5-12)-121912

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time * - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 . Print Date: January 09, 2013

			_		THE PH		015			
Client: Lab Order: Project: Lab ID:	Weston Solutions 12120653 20405.012.008.2038.00 12120653-005A), Pilsen Soil, SA	, Pilser	Tag	Client Sample ID: PA-AY13(12-24)-121912 Tag Number: Collection Date: 12/19/2012 12:55:00 PM Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed			
Mercury		SW7471/	A		Prep	Date: 12/28/2012	Analyst: LB			
Mercury		0.72	0.048	n	ng/Kg-dry	2	1/2/2013			
Metals by ICP/MS		SW6020	(SW30	50B)	Prep	Date: 12/28/2012	Analyst: JG			
Antimony		110 J	23	n	ng/Kg-dry	100	12/31/2012			
Arsenic		33	2.3	n	ng/Kg-dry	20	12/29/2012			
Barium		1200	2.3	n	ng/Kg-dry	20	12/29/2012			
Cadmium		7.2	1.1	n	ng/Kg-dry	20	12/29/2012			
Chromium		37	2.3	n	ng/Kg-dry	20	12/29/2012			
Copper		1900	5.6	n	ng/Kg-dry	20	12/29/2012			
Lead		3200	4.5	n	ng/Kg-dry	20	12/29/2012			
Selenium		ND	2.3	n	ng/Kg-dry	20	12/29/2012			
Silver		ND	2.3	n	ng/Kg-dry	20	12/29/2012			
Tin		760 J	23	* n	ng/Kg-dry	20	12/29/2012			
Zinc		2600	110	n	ng/Kg-dry	200	12/29/2012			
pH (25 °C)		SW9045	C		Prep	Date: 12/28/2012	Analyst: RW			
pH		8.0			pH Units	1	12/28/2012			
Percent Moisture		D2974			Prep	Date: 12/28/2012	Analyst: RW			
Percent Moisture		17.2	0.2		wt%	1	12/29/2012			

20 1/14/13

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

- E Value above quantitation range
- H Holding time exceeded

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> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions	Weston Solutions			Client Sample ID: PA-AY13(12-24)-121912				
Lab Order:	12120653			Tag	Numbe	r: Fine Graine	đ		
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilser	Collection Date: 12/19/2012 12:55:00 PM					
Lab ID:	12120653-005B				Matri	x: Soil			
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Bioaccessibility	Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG		
Lead		27	0.025		mg/L	5	1/4/2013		
Metals by ICP/I	NS	SW602	0 (SW30	50B)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		4000	5.4	π	ng/Kg-dry	100	1/3/2013		

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

		Client Sample ID: PA-AY13(12-24)-121					
Lab Order: 12120653			Tag Number: Course Grain				ned
Project:	20405.012.008.2038.00, Pi	ilsen Soil, SA	A, Pilser	n Collec	tion Dat	e: 12/19/2012	12:55:00 PM
Lab ID:	12120653-005C				Matrix: Soil		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client: Lab Order: Project: Lab ID:	Weston Solutions 12120653 20405.012.008.2038.00 12120653-006A	0, Pilsen Soil, SA	, Pilser	Tag	g Numbe ction Da	D: PA-AC07(0- r: te: 12/19/2012 x: Soil	
Analyses	12120033-000A	Result	RL	Qualifier			Date Analyzed
Analyses		Result	nL.	Quaimer	Onns	Dr	Date Analyzeu
Mercury		SW7471/	A		Prec	Date: 12/28/201	2 Analyst: LB
Mercury		0.37	0.021	r	ng/Kg-dry	1	12/28/2012
Metals by ICP/MS	3	SW6020	(SW30	50B)	Prep	Date: 12/28/201	2 Analyst: JG
Antimony		ND	24		ng/Kg-dry	100	12/31/2012
Arsenic		6.8	2.4	r	ng/Kg-dry	20	12/29/2012
Barium		400	2.4	T	ng/Kg-dry	20	12/29/2012
Cadmium		9.3	1.2	r	ng/Kg-dry	20	12/29/2012
Chromium		24	2.4	r	ng/Kg-dry	20	12/29/2012
Copper		2100	60	r	ng/Kg-dry	200	12/29/2012
Lead		940	4.8	r	ng/Kg-dry	20	12/29/2012
Selenium		ND	2.4	r	ng/Kg-dry	20	12/29/2012
Silver		ND	2.4	n	ng/Kg-dry	20	12/29/2012
Tin		130 J	24	* n	ng/Kg-dry	20	12/29/2012
Zinc		2600	120	n	ng/Kg-dry	200	12/29/2012
pH (25 °C)		SW90450	C		Prep	Date: 12/28/201	2 Analyst: RW
pН		8.1			pH Units	1	12/28/2012
Percent Moisture		D2974			Prep	Date: 12/28/201	2 Analyst: RW
Percent Moisture		11.2	0.2		wt%	1	12/29/2012

21/14/13

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

							7407
Client:	Weston Solutions			Client S	ample I	D: PA-AC07(0	-6)-121912
Lab Order:	12120653		Tag Number: Fine Grained				d
Project:	20405.012.008.2038.00,	Pilsen Soil, SA	, Pilser	n Collec	tion Da	te: 12/19/2012	12:20:00 PM
Lab ID:	12120653-006B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibility	y Asay Metals by ICP/MS	EPA 920	0/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG
Lead		16	0.025		mg/L	5	1/4/2013
Metals by ICP/I	MS	SW6020	(SW30	50B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		3200	5	П	ng/Kg-dry	100	1/3/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions		Client Sample ID: PA-AC07(0-6)-121912						
Lab Order:	12120653			Та	g Number	: Course Grai	ned		
Project:	20405.012.008.2038.00,	Pilsen Soil, SA	, Pilser	Colle	ction Dat	e: 12/19/2012	12:20:00 PM		
Lab ID: 12120653-006C				Matrix:		x: Soil	Soil		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
	AS		(SW30	(00)	Deer	Date: 1/3/2013	Analyst: JG		

Qualifiers:

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

					That Day	te. January	09,2015
Client: Lab Order: Project:	Weston Solutions 12120653 20405.012.008.2038.00	, Pilsen Soil, SA	, Pilser	Tag	g Numbe	r:	8(0-6)-121912 012 2:35:00 PM
Lab ID:	12120653-007A				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW7471/	A		Prep	Date: 12/28	/2012 Analyst: LB
Mercury		0.27	0.019		mg/Kg-dry	1	12/28/2012
Metals by ICP/MS	5	SW6020	(SW30	50B)	Prep	Date: 12/28	/2012 Analyst: JG
Antimony		ND	21		ng/Kg-dry	100	12/31/2012
Arsenic		5.5	2.1	r	ng/Kg-dry	20	12/29/2012
Barium		140	2.1	r	ng/Kg-dry	20	12/29/2012
Cadmium		4.5	1	r	ng/Kg-dry	20	12/29/2012
Chromium		17	2.1	r	ng/Kg-dry	20	12/29/2012
Copper		660	5.1	r	ng/Kg-dry	20	12/29/2012
Lead		570	4.1	r	ng/Kg-dry	20	12/29/2012
Selenium		ND	2.1	(r	ng/Kg-dry	20	12/29/2012
Silver		ND	2.1		ng/Kg-dry	20	12/29/2012
Tin		65 J	21	* п	ng/Kg-dry	20	12/29/2012
Zinc		1700	10	n	ng/Kg-dry	20	12/29/2012
pH (25 °C)		SW9045	C		Prep	Date: 12/28/	2012 Analyst: RW
pН		8.4			pH Units	1	12/28/2012
Percent Moisture	io.	D2974			Prep	Date: 12/28/	2012 Analyst: RW
Percent Moisture		10.0	0.2		wt%	1	12/29/2012

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Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client Sample ID: PA-AC08(0-6)-121912				
Lab Order:	12120653		Tag Number: Fine Grained					
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilser	n Collec	tion Dat	te: 12/19/2012	2 2:35:00 PM	
Lab ID:	12120653-007B				Matrix	x: Soil		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Bioaccessibility	Asay Metals by ICP/MS	EPA 92	200/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG	
Lead		10	0.025		mg/L	5	1/4/2013	
Metals by ICP/I	VIS	SW602	0 (SW30	50B)	Prep	Date: 1/3/2013	Analyst: JG	
Lead		1000	4.6		ng/Kg-dry	100	1/3/2013	

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Project: 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen Collection Date: 12/19/2012 2:35:00 PM Lab ID: 12120653-007C Matrix: Soil	Client:	Weston Solutions					D: PA-AC08(0	1. C.
Lab ID: 12120653-007C Matrix: Soil	Lab Order:	12120653						ned
	Project:	20405.012.008.2038.00,]	Pilsen Soil, SA	, Pilser	colle	ction Da	te: 12/19/2012	2:35:00 PM
Analyses Result RL Qualifier Units DF Date Analyses	Lab ID:	12120653-007C			Matrix: Soil			
The function of the second sec	Analyses	and the second	Result	RL	Qualifier	Units	DF	Date Analyzed
	Metals by ICP/I Lead		SW6020 300	20		ng/Kg-dry	Date: 1/3/2013 100	Analyst: JC 1/4/2013

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Client: Lab Order:	Weston Solutions . 12120653			Tag	g Numbe	r:	9(0-6)-121912
Project:	20405.012.008.2038.00	, Pilsen Soil, SA	, Pilsen	Colle			012 2:45:00 PM
Lab ID:	12120653-008A				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyze
Mercury		SW7471/	A		Prep	Date: 12/28/	2012 Analyst: LB
Mercury		0.076	0.019	r	ng/Kg-dry	1	12/28/2012
Metals by ICP/MS		SW6020	(SW30	50B)	Prep	Date: 12/28/	2012 Analyst: JG
Antimony		ND	19	r	ng/Kg-dry	100	12/31/2012
Arsenic		3.4	1.9	r	ng/Kg-dry	20	12/29/2012
Barium		68	1.9	r	ng/Kg-dry	20	12/29/2012
Cadmium		2.1	0.95	r	ng/Kg-dry	20	12/29/2012
Chromium		11	1.9	r	ng/Kg-dry	20	12/29/2012
Copper		580	4.8	r	ng/Kg-dry	20	12/29/2012
Lead		340	3.8	c	ng/Kg-dry	20	12/29/2012
Selenium		ND	1.9	n	ng/Kg-dry	20	12/29/2012
Silver		ND	1.9	n	ng/Kg-dry	20	12/29/2012
Tin		37 J	19	* n	ng/Kg-dry	20	12/29/2012
Zinc		750	9.5	n	ng/Kg-dry	20	12/29/2012
pH (25 °C)		SW90454	C		Prep	Date: 12/28/	2012 Analyst: RM
pH		9.9			pH Units	1	12/28/2012
Percent Moisture		D2974			Prep	Date: 12/28/	2012 Analyst: RW
Percent Moisture		5.3	0.2		wt%	1	12/29/2012

114/13

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded



2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

						Alternative states and the second	
Client:	Weston Solutions		Client Sample ID: PA-AC09(0-6)-121912				
Lab Order:	12120653			Tag	Numbe	r: Fine Graine	d
Project:	20405.012.008.2038.00,	Pilsen Soil, S	A, Pilse	n Collec	tion Da	te: 12/19/2012	2:45:00 PM
Lab ID:	12120653-008B				Matri	ix: Soil	10.00
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
	y Asay Metals by ICP/MS			(SW3005A)		Date: 1/2/2013	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Lead		7.8	0.025		mg/L	5	1/4/2013
Metals by ICP/	WS		0 (SW3			Date: 1/3/2013	
Lead		1100	5	Π	ng/Kg-dry	100	1/3/2013

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> Report Date: January 09, 2013 Print Date: January 09, 2013

						, ,	
Client:	Weston Solutions			Client S	Sample I	D: PA-AC09(0	0-6)-121912
Lab Order:	12120653			Ta	g Numbe	r: Course Grai	ined
Project:	20405.012.008.2038.00,	Pilsen Soil, SA	A, Pilser	n Colle	ction Da	te: 12/19/2012	2:45:00 PM
Lab ID:	12120653-008C				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/M	S	SW6020				Date: 1/3/2013	
Lead		280	20	1	ng/Kg-dry	100	1/4/2013

Qualifiers:

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Client: Lab Order:	Weston Solutions 12120653			Ta	g Numbe	r:	AC10(0-6	
Project:	20405.012.008.2038.00), Pilsen Soil, S	A, Pilse	n Colle			19/2012 3:	55:00 PM
Lab ID:	12120653-009A		-		Matri	x: Soil		
Analyses		Result	RL	Qualifier	r Units	DF	D	ate Analyzed
Mercury		SW747	'1A		Prep	Date: 1	12/28/2012	Analyst: LB
Mercury		0.044	0.021		mg/Kg-dry	1		12/28/2012
Metals by ICP/M	AS	SW602	20 (SW30	50B)	Prep	Date: 1	12/28/2012	Analyst: JG
Antimony		ND	19		mg/Kg-dry	100		12/31/2012
Arsenic		ND	1.9		mg/Kg-dry	20		12/29/2012
Barium		32	1.9		mg/Kg-dry	20		12/29/2012
Cadmium		ND	0.96		mg/Kg-dry	20		12/29/2012
Chromium		7	1.9		mg/Kg-dry	20		12/29/2012
Copper		230	4.8		mg/Kg-dry	20		12/29/2012
Lead		63	0.96		mg/Kg-dry	20		12/29/2012
Selenium		ND	1.9		mg/Kg-dry	20		12/29/2012
Silver		ND	1.9	D.	mg/Kg-dry	20		12/29/2012
Tin		14 J	9.6	*	mg/Kg-dry	20		12/29/2012
Zinc		180	9.6	1	mg/Kg-dry	20		12/29/2012
pH (25 °C)		SW904	5C		Prep	Date: 1	2/28/2012	Analyst: RW
pН		9.2			pH Units	1		12/28/2012
Percent Moistu	re	D2974			Prep	Date: 1	2/28/2012	Analyst: RW
Percent Moisture		4.3	0.2	*	wt%	1		12/29/2012

21

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions	****		Client S	ample I	D: PA-AC10(0	-6)-121912
Lab Order:	12120653			Tag	Numbe	r: Fine Graine	d
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilser	n Collec	tion Dat	te: 12/19/2012	3:55:00 PM
Lab ID:	12120653-009B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG
Lead		1.9	0.025		mg/L	5	1/7/2013
Metals by ICP/	MS	SW602	0 (SW30	050B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		180	19	n	ng/Kg-dry	100	1/4/2013

Qualifiers:

- J Analyte detected below quantitation limits
 B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

					TIME DATE	er sundury os,	2015
Client:	Weston Solutions			Client S	Sample II	D: PA-AC10(0)-6)-121912
Lab Order:	12120653			Tag	Number	r: Course Grai	ined
Project:	20405.012.008.2038.00	, Pilsen Soil, S	A, Pilser	1 Collea	ction Dat	te: 12/19/2012	3:55:00 PM
Lab ID:	12120653-009C				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N	MS	SW602 98	20 (SW30		Prep ng/Kg-dry	Date: 1/3/2013	Analyst: JG 1/4/2013

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

						e. January	0, 20	
Client: Lab Order: Project: Lab ID:	Weston Solutions 12120653 20405.012.008.2038.00 12120653-010A	0, Pilsen Soil, S.	A, Pilse	Та	ng Numbe ection Da	D: PA-AC r: te: 12/19/2 x: Soil		
Analyses		Result	RL	Qualifie	r Units	DF	D	ate Analyzed
Mercury		SW747	1A		Prep	Date: 12/2	8/2012	Analyst: LB
Mercury		1.7	0.21		mg/Kg-dry	10		1/2/2013
Metals by ICP/I	MS	SW602	0 (SW30	050B)	Prep	Date: 12/2	8/2012	Analyst: JG
Antimony		ND	25		mg/Kg-dry	100		12/31/2012
Arsenic		26	2.5		mg/Kg-dry	20		12/29/2012
Barium		530	2.5		mg/Kg-dry	20		12/29/2012
Cadmium		10	1.2		mg/Kg-dry	20		12/29/2012
Chromium		1600	2.5		mg/Kg-dry	20		12/29/2012
Copper		870	6.2		mg/Kg-dry	20		12/29/2012
Lead		2700	1.2		mg/Kg-dry	20		12/29/2012
Selenium		ND	2.5		mg/Kg-dry	20		12/29/2012
Silver		ND	2.5		mg/Kg-dry	20		12/29/2012
Tin		120 J	12	.*	mg/Kg-dry	20		12/29/2012
Zinc		4800	120		mg/Kg-dry	200		12/29/2012
pH (25 °C)		SW904	5C		Prep	Date: 12/2	8/2012	Analyst: RW
pH		8.2			pH Units	1		12/28/2012
Percent Moistu	re	D2974			Prep	Date: 12/20	8/2012	Analyst: RW
Percent Moisture	3	19.9	0.2		wt%	1		12/29/2012

21/

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

					-		
Client:	Weston Solutions			Client S	ample I	D: PA-AC01(0	-6)-121912
Lab Order:	12120653			Tag	Numbe	r: Fine Graine	d
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilser	1 Collec	tion Da	te: 12/19/2012	4:00:00 PM
Lab ID:	12120653-010B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibility	y Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)	Prep	Date: 1/3/2013	Analyst: JG
Lead		8.6	0.025		mg/L	5	1/4/2013
Metals by ICP/I	MS	SW602	0 (SW30	50B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		2000	25	Π	ng/Kg-dry	100	1/4/2013

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Weston Solutions			Client S	ample II	D: PA-AC01(0	0-6)-121912
12120653			Tag	, Number	r: Course Grai	ined
20405.012.008.2038.00, 1	Pilsen Soil, S	A, Pilser	Collec	tion Dat	e: 12/19/2012	4:00:00 PM
12120653-010C			5.5	Matri	k: Soil	1.0
	Result	RL	Qualifier	Units	DF	Date Analyzed
IS	SW602	0 (SW30		Prep	Date: 1/3/2013	Analyst: JG 1/4/2013
	12120653 20405.012.008.2038.00, 1	12120653 20405.012.008.2038.00, Pilsen Soil, S 12120653-010C Result IS SW602	12120653 20405.012.008.2038.00, Pilsen Soil, SA, Pilser 12120653-010C Result RL IS SW6020 (SW30	12120653 Tag 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen Collect 12120653-010C Result RL Qualifier SW6020 (SW3050B) SW6020 (SW3050B) SW6020 (SW3050B) SW6020 (SW3050B)	12120653 Tag Number 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen Collection Date 12120653-010C Matrix Result RL Qualifier Units IS SW6020 (SW3050B) Prep	12120653 Tag Number: Course Grait 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen Collection Date: 12/19/2012 12120653-010C Matrix: Soil Result RL Qualifier Units DF IS SW6020 (SW3050B) Prep Date: 1/3/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	ample I	D: PA-AC01(0-	6)-121912D
Lab Order:	12120653			Tag	g Numbe	r:	
Project:	20405.012.008.2038.00), Pilsen Soil, SA,	Pilsen	Collec	ction Da	te: 12/19/2012 4	:05:00 PM
Lab ID:	12120653-011A				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW7471A			Prep	Date: 12/28/2012	Analyst: LB
Mercury		1.9	0.2	n	ng/Kg-dry	10	1/2/2013
Metals by ICP/MS	() () () () () () () () () ()	SW6020	(SW30	50B)	Prep	Date: 12/28/2012	Analyst: JG
Antimony		ND	24	п	ng/Kg-dry	100	12/31/2012
Arsenic		41	2.4	п	ng/Kg-dry	20	12/29/2012
Barium		540	2.4	0	ng/Kg-dry	20	12/29/2012
Cadmium		13	1.2	n	ng/Kg-dry	20	12/29/2012
Chromium		2100	24	п	ng/Kg-dry	200	12/29/2012
Copper		1000	5.9	n	ng/Kg-dry	20	12/29/2012
Lead		2600	1.2	п	ng/Kg-dry	20	12/29/2012
Selenium		3.7	2.4	n	ng/Kg-dry	20	12/29/2012
Silver		ND	2.4	n	ng/Kg-dry	20	12/29/2012
Tin		130 7	12	* n	ng/Kg-dry	20	12/29/2012
Zinc		4100	120	п	ng/Kg-dry	200	12/29/2012
pH (25 °C)		SW90450	5		Prep	Date: 12/28/2012	Analyst: RW
рH		8.0		- 13	pH Units	1	12/28/2012
Percent Moisture		D2974			Prep	Date: 12/28/2012	Analyst: RW
Percent Moisture		18.2	0.2		wt%	1	12/29/2012

21/14/13

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	Sample I	D: PA-AC01(0	-6)-121912D
Lab Order:	12120653			Tag	g Numbe	r: Fine Graine	d
Project:	20405.012.008.2038.00,	Pilsen Soil, S	A, Pilse	n Collea	ction Da	te: 12/19/2012	4:05:00 PM
Lab ID:	12120653-011B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	200/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG
Lead		13	0.025	*	mg/L	5	1/7/2013
Metals by ICP/	MS	SW602	0 (SW30	50B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		2400	26	n	ng/Kg-dry	100	1/4/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

1.0.1						and the second se	-6)-121912D
Lab Order:	12120653			Tag	Number	: Course Grai	ned
Project:	20405.012.008.2038.00,	Pilsen Soil, SA	, Pilsen	Collec	tion Dat	e: 12/19/2012	4:05:00 PM
Lab ID:	12120653-011C				Matrix	c: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

			_								
Client: Lab Order:						Client Sample ID: PA-AC02(0-6)-121912 Tag Number:					
Project:	1974 TS 1971 - 11 - 14 - 14 - 14) Pilsen Soil SA	Pilsen		1	te: 12/19/2012	4-10-00 PM				
Lab ID:				Conce			4.10.00110				
Lab ID:	12120653-012A	Matrix: Soil									
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed				
Mercury		SW7471/	A		Prep	Date: 12/28/20	12 Analyst: LB				
Mercury		0.77	0.041	0	ng/Kg-dry	2	1/2/2013				
Metals by ICP/MS	3	SW6020	(SW30	50B)	Prep	Date: 12/28/20	12 Analyst: JG				
Antimony		ND	22	F	ng/Kg-dry	100	12/31/2012				
Arsenic		41	2.2	n	ng/Kg-dry	20	12/29/2012				
Barium		500	2.2	0	ng/Kg-dry	20	12/29/2012				
Cadmium		18	1.1	п	ng/Kg-dry	20	12/29/2012				
Chromium		1700	2.2	n	ng/Kg-dry	20	12/29/2012				
Copper		1100	5.4	n	ng/Kg-dry	20	12/29/2012				
Lead		1900	4.3	n	ng/Kg-dry	20	12/29/2012				
Selenium		3.4	2.2	n	ng/Kg-dry	20	12/29/2012				
Silver		3.1	2.2	n	ng/Kg-dry	20	12/29/2012				
Tin		150 J	22	* п	ng/Kg-dry	20	12/29/2012				
Zinc		4400	110	п	ng/Kg-dry	200	12/29/2012				
pH (25 °C)		SW90450	C		Prep	Date: 12/28/201	2 Analyst: RW				
pH		7.8			pH Units	1	12/28/2012				
Percent Moisture		D2974			Prep	Date: 12/28/201	2 Analyst: RW				
Percent Moisture		23.3	0.2	1	wt%	1	12/29/2012				

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Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client Sample ID: PA-AC02(0-6)-121912					
Lab Order:	12120653			Таз	g Numbe	r: Fine Graine	d		
Project:	20405.012.008.2038.00, Pilsen Soil, SA, Pilsen			n Collee	Collection Date: 12/19/2012 4:10:00 PM				
Lab ID:	12120653-012B			Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	200/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG		
Lead		12	0.025	*	mg/L	5	1/7/2013		
Metals by ICP/	MS	SW602	0 (SW3	050B)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		1900	24	,	ng/Kg-dry	100	1/4/2013		

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	Sample II): PA-AC02(0)-6)-121912
Lab Order:	12120653			Та	g Number	: Course Grai	ined
Project:	20405.012.008.2038.00, Pils	en Soil, SA	, Pilser	Colle	ction Dat	e: 12/19/2012	4:10:00 PM
Lab ID:	12120653-012C			Matrix: Soil			
Analyses	1	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS		SW6020		50B)		Date: 1/3/2013	1.1.1.1.1

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

					Time Date. January 09, 2015					
Client: Lab Order: Project: Lab ID:	Weston Solutions 12120653 20405.012.008.2038.00 12120653-013A), Pilsen Soil, SA	, Pilser	Та	g Numbe ction Da	D: PA-AC02(0-6 r: te: 12/19/2012 4 x: Soil				
Analyses	12120033-013A	Result	RL	Qualifier			Date Analyzed			
Mercury		SW7471/	A		Pren	Date: 12/28/2012	Analyst: LB			
Mercury		0.7	0.023	1.2	mg/Kg-dry	1	1/2/2013			
Metals by ICP/M	s	SW6020	(SW30	50B)	Prep	Date: 12/28/2012	Analyst: JG			
Antimony		ND	26		mg/Kg-dry	100	12/31/2012			
Arsenic		41	2.6	1	mg/Kg-dry	20	12/29/2012			
Barium		400	2.6		mg/Kg-dry	20	12/29/2012			
Cadmium		12	1.3		mg/Kg-dry	20	12/29/2012			
Chromium		3400	26		mg/Kg-dry	200	12/29/2012			
Copper		1600	6.6		mg/Kg-dry	20	12/29/2012			
Lead		2000	1.3		mg/Kg-dry	20	12/29/2012			
Selenium		ND	2.6		mg/Kg-dry	20	12/29/2012			
Silver		3	2.6		mg/Kg-dry	20	12/29/2012			
Tin		210 J	13		mg/Kg-dry	20	12/29/2012			
Zinc		4600	130	1	mg/Kg-dry	200	12/29/2012			
pH (25 °C)		SW9045	C		Prep	Date: 12/28/2012	Analyst: RW			
pН		7.7			pH Units	1	12/28/2012			
Percent Moistur	8	D2974			Prep	Date: 12/28/2012	Analyst: RW			
Percent Moisture		24.4	0.2		wt%	1	12/29/2012			

21/14/13

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

					(1				
Client:	Weston Solutions			Client S	ample I	D: PA-AC02(0)-6)-121912D		
Lab Order:	12120653			Та	Numbe	r: Fine Graine	d		
Project:	ect: 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen			n Colle	Collection Date: 12/19/2012 4:10:00 PM				
Lab ID:	DID: 12120653-013B			Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)	Prep	Date: 1/2/2013	Analyst: JG		
Lead		12	0.025		mg/L	5	1/7/2013		
Metals by ICP/	MS	SW602	0 (SW3	050B)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		2000	26	r	ng/Kg-dry	100	1/4/2013		

Qua	lifiers:
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- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	Sample II	D: PA-AC02(0)-6)-121912D	
Lab Order:	12120653				1	r: Course Grai		
Project: 20405.012.008.2038.00, Pilsen Soil, SA, Pils			SA, Pilsen	A, Pilsen Collection Date: 12/19/2012 4:10:00 PM Matrix: Soil				
Lab ID:	12120653-013C							
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Metals by ICP/M	IS	SW60	020 (SW30	2 - 0 -	Prep ng/Kg-dry	Date: 1/3/2013	Analyst: JG 1/4/2013	

 Qualifiers:
 ND - Not Detected at the Reporting Limit
 RL - Reporting / Quantitation Limit for the analysis

 Qualifiers:
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits

 B - Analyte detected in the associated Method Blank
 R - RPD outside accepted recovery limits

 HT - Sample received past holding time
 E - Value above quantitation range

 * - Non-accredited parameter
 H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client: Lab Order:	Weston Solutions 12120653				Sample I g Numbe		2(6-12)-121912
Project:	20405.012.008.2038.00). Pilsen Soil, SA	Pilser	Colle	ction Da	te: 12/19/20	012 4:25:00 PM
Lab ID:	12120653-014A	.,	,			x: Soil	12 1120100 1 112
Analyses	12120035-01411	Result	RL	Qualifier		DF	Date Analyzed
				£			
Mercury		SW7471/	A		Prep	Date: 12/28/	2012 Analyst: LB
Mercury		2.9	0.21	r	ng/Kg-dry	10	1/2/2013
Metals by ICP/MS		SW6020	(SW30	50B)	Prep	Date: 12/28/	2012 Analyst: JG
Antimony		ND	20	r	ng/Kg-dry	100	12/31/2012
Arsenic		40	2	r	ng/Kg-dry	20	12/29/2012
Barium		680	2	r	ng/Kg-dry	20	12/29/2012
Cadmium		13	0.99	r	ng/Kg-dry	20	12/29/2012
Chromium		50	2		ng/Kg-dry	20	12/29/2012
Copper		660	5	r	ng/Kg-dry	20	12/29/2012
Lead		2500	0.99	r	ng/Kg-dry	20	12/29/2012
Selenium		2.9	2	r	ng/Kg-dry	20	12/29/2012
Silver		9.6	2	n	ng/Kg-dry	20	12/29/2012
Tin		88 J	9.9	· n	ng/Kg-dry	20	12/29/2012
Zinc		3000	99	n	ng/Kg-dry	- 200	12/29/2012
pH (25 °C)		SW90450	0		Prep	Date: 12/28/	2012 Analyst: RW
pH		8.0			pH Units	1	12/28/2012
Percent Moisture		D2974			Prep	Date: 12/28/	2012 Analyst: RW
Percent Moisture		15.3	0.2		wt%	1	12/29/2012

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Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

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Client:	Weston Solutions			Client S	Sample I	D: PA-AY02(6	5-12)-121912
Lab Order:	12120653			Ta	g Numbe	r: Fine Graine	đ
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilser	n Colle	ction Da	te: 12/19/2012	4:25:00 PM
Lab ID:	12120653-014B	- 10.0	- 1.5		Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibility	Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)) Prep mg/L	Date: 1/3/2013	Analyst: JG 1/3/2013
and the second							
Metals by ICP/I Lead	NS	SW602 3000	0 (SW30		Prep mg/Kg-dry	Date: 1/3/2013 100	Analyst: JG 1/4/2013

Qualifiers:

- J Analyte detected below quantitation limits
 B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

	2120653 0405.012.008.2038.00, Pilsen Soil, SA,	Dilasa		g Number	r: Course Grai	ned		
Project: 2	0405.012.008.2038.00, Pilsen Soil, SA.	Dilana						
		Plisen	Colle	ction Dat	e: 12/19/2012	4:25:00 PM		
Lab ID: 1	D: 12120653-014C				Matrix: Soil			
Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed		

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

						ar cannary or,	
Client: Lab Order: Project:	Weston Solutions 12120653 20405.012.008.2038.00) Pilsen Soil, SA	Pilser	Tag	, Numbe	D: PA-AY04(6 r: te: 12/19/2012	
Lab ID:	12120653-015A	, i nour 5011, 511	, 2 11001	e conce		x: Soil	1.50.00114
Analyses	12120035-01511	Result	RL	Qualifier		DF	Date Analyzed
Mercury		SW7471/	Ą		Prec	Date: 12/28/20	12 Analyst: LB
Mercury		1.5	0.11	л	ng/Kg-dry	5	1/2/2013
Metals by ICP/MS	ê.	SW6020	(SW30	50B)	Prep	Date: 12/28/20	12 Analyst: JG
Antimony		440 J	26	n	ng/Kg-dry	100	12/31/2012
Arsenic		86	2.6	n	ng/Kg-dry	20	12/29/2012
Barium		1000	2.6	n	ng/Kg-dry	20	12/29/2012
Cadmium		22	1.3	n	ng/Kg-dry	20	12/29/2012
Chromium		510	2.6	n	ng/Kg-dry	20	12/29/2012
Copper		4000	65	n	ng/Kg-dry	200	12/29/2012
Lead		8700	1.3	п	ng/Kg-dry	20	12/29/2012
Selenium		4	2.6	n	ng/Kg-dry	20	12/29/2012
Silver		29	2.6	n	ng/Kg-dry	20	12/29/2012
Tin		2200 J	13	• n	ng/Kg-dry	20	12/29/2012
Zinc		6000	130	п	ng/Kg-dry	200	12/29/2012
pH (25 °C)		SW90450	0		Prep	Date: 12/28/20	12 Analyst: RW
pН		7.7			pH Units	1	12/28/2012
Percent Moisture		D2974			Prep	Date: 12/28/20	12 Analyst: RW
Percent Moisture		27.6	0.2		wt%	1	12/29/2012

11/1/13

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	Sample I	D: PA-AY04(6	-12)-121912
Lab Order:	12120653			Тар	g Numbe	r: Fine Graine	d
Project:	20405.012.008.2038.00,	Pilsen Soil, S	A, Pilse	n Colle	ction Da	te: 12/19/2012	4:30:00 PM
Lab ID:	12120653-015B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	200/6020	(SW3005A)	Prep	Date: 1/3/2013	Analyst: JG
Lead		27	0.025	•	mg/L	5	1/3/2013
Metals by ICP/	MS	SW602	0 (SW3	050B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		7500	25	1	ng/Kg-dry	100	1/4/2013

Qualifiers:

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter
 - von-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> Report Date: January 09, 2013 Print Date: January 09, 2013

Project: 20405.012.008.2038.00, Pilsen Soil, SA, Pilsen Collection Date: 12/19/2012 4:30:00 Lab ID: 12120653-015C Matrix: Soil	Client:	Weston Solutions			Client S	Sample I	D: PA-AY04(6	5-12)-121912
Lab ID: 12120653-015C Matrix: Soil	Lab Order:	12120653			Tag	y Numbe	r: Course Grai	ined
	Project:	20405.012.008.2038.0	00, Pilsen Soil	l, SA, Pilsen	Colle	ction Da	te: 12/19/2012	4:30:00 PM
	Lab ID:	12120653-015C				Matri	x: Soil	1
Analyses Result RL Qualifier Units DF Date An	Analyses		Result	RL	Qualifier	Units	DF	Date Analyze

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

							See Street	
Client: Lab Order:	Weston Solutions 12120653				Sample I g Numbe		Y16(12-	24)-121912
Project:	20405.012.008.2038.00	Pilsen Soil SA	Pilser	- 1. L.		20 Mar 1 Aug 20	2012 4.	35:00 PM
		, i iisen bon, ori	, 1 11301.	i cone			2012 1,	55.00 I IM
Lab ID:	12120653-016A	142		_	Matri	x: Soil		
Analyses		Result	RL	Qualifier	Units	DF	D	ate Analyzed
Mercury		SW7471/	4		Prep	Date: 12/	28/2012	Analyst: LB
Mercury		9.2	1.2	1	mg/Kg-dry	50		1/2/2013
Metals by ICP/MS	6.00	SW6020	(SW30	50B)	Prep	Date: 12/	28/2012	Analyst: JG
Antimony		ND	25		mg/Kg-dry	100		12/31/2012
Arsenic		16	2.5	r	ng/Kg-dry	20		12/29/2012
Barium		320	2.5	1	mg/Kg-dry	20		12/29/2012
Cadmium		3.2	1.3	1	mg/Kg-dry	20		12/29/2012
Chromium		17	2.5	r	ng/Kg-dry	20		12/29/2012
Copper		450	6.4	r	mg/Kg-dry	20		12/29/2012
Lead		2100	5.1	r	mg/Kg-dry	20		12/29/2012
Selenium		ND	2.5	r	ng/Kg-dry	20		12/29/2012
Silver		ND ,	2.5	r	ng/Kg-dry	20		12/29/2012
Tin		57J	25	* 1	ng/Kg-dry	20		12/29/2012
Zinc		980	130	r	mg/Kg-dry	200		12/29/2012
pH (25 °C)		SW90450	C		Prep	Date: 12/	28/2012	Analyst: RW
pН		8.0			pH Units	1		12/28/2012
Percent Moisture		D2974			Prep	Date: 12/	28/2012	Analyst: RW
Percent Moisture		20.6	0.2		wt%	1		12/29/2012

2/

Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

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Client:	Weston Solutions			Client S	Sample I	D: PA-AY16(1	2-24)-121912
Lab Order:	12120653			Tag	g Numbe	r: Fine Graine	d
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilse	n Colle	ction Da	te: 12/19/2012	4:35:00 PM
Lab ID:	12120653-016B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	200/6020	(SW3005A)	Prep	Date: 1/3/2013	Analyst: JG
Lead		21	0.025		mg/L	5	1/3/2013
Metals by ICP/	MS	SW602	0 (SW3)	050B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		2500	21	ŗ	mg/Kg-dry	100	1/4/2013

Qualifiers:

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Client: Lab Order:	Weston Solutions 12120653			Client Sample ID: PA-AY16(12-24)-121912 Tag Number: Course Grained			
Project:	20405.012.008.2038.00,	Pilsen Soil, SA	, Pilser			e: 12/19/2012	
Lab ID:	12120653-016C				Matri	k: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	3	SW6020	(SW30		Prep mg/Kg-dry	Date: 1/3/2013	Analyst: J 1/4/2013

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

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Client:	Weston Solutions			Client S	Sample I	D: PA-AY18(6-	12)-121912
Lab Order:	12120653			Ta	g Numbe	r:	
Project:	20405.012.008.2038.0	0, Pilsen Soil, SA	, Pilser	n Colle	ction Da	te: 12/19/2012 4	:40:00 PM
Lab ID:	12120653-017A				Matri	x: Soil	(
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW7471/	A		Prep	Date: 12/28/2012	Analyst: LB
Mercury		1.2	0.067	1.0	mg/Kg-dry	3	1/2/2013
Metals by ICP/M	5	SW6020	(SW30	50B)	Prep	Date: 12/28/2012	Analyst: JG
Antimony		54 J	22	1	mg/Kg-dry	100	12/31/2012
Arsenic		18	2.2		mg/Kg-dry	20	12/29/2012
Barium		510	2.2		mg/Kg-dry	20	12/29/2012
Cadmium		40	1.1		mg/Kg-dry	20	12/29/2012
Chromium		72	2.2	1	mg/Kg-dry	20	12/29/2012
Copper		33000	560	i i	mg/Kg-dry	2000	12/31/2012
Lead		3400	1.1		mg/Kg-dry	20	12/29/2012
Selenium		5.5	2.2		mg/Kg-dry	20	12/29/2012
Silver		7.3	2.2		mg/Kg-dry	20	12/29/2012
Tin		1000 J	11	* 1	mg/Kg-dry	20	12/29/2012
Zinc		14000	110	r	mg/Kg-dry	200	12/29/2012
pH (25 °C)		SW90450	C		Prep	Date: 12/28/2012	Analyst: RW
pН		7.5			pH Units	1	12/28/2012
Percent Moisture	9	D2974			Prep	Date: 12/28/2012	Analyst: RW
Percent Moisture		18.2	0.2	*	wt%	1	12/29/2012

2//

Qualifiers:

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	ample I	D: PA-AY18(6	-12)-121912
Lab Order:	12120653			Tag	Numbe	r: Fine Graine	d
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilse	n Collec	tion Da	te: 12/19/2012	4:40:00 PM
Lab ID:	12120653-017B				Matri	x: Soil	
Analyses	-	Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibility	y Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)	Prep	Date: 1/3/2013	Analyst: JG
Lead		33	0.025	•	mg/L	5	1/3/2013
Metals by ICP/I	WS	SW602	0 (SW30	050B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		4400	22		ng/Kg-dry	100	1/4/2013

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Metals by ICP/MS	1	SW6020	(SW30	100 m 100	Prep na/Ka-dry	Date: 1/3/2013	Analyst: JG 1/4/2013
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Lab ID:	12120653-017C	- House			Matri	x: Soil	
Project:	20405.012.008.2038.00,	Pilsen Soil, SA	A, Pilser	Collec	ction Dat	te: 12/19/2012	4:40:00 PM
Lab Order:	12120653			Tag	g Number	r: Course Grai	ned
Client:	Weston Solutions			Client S	Sample II	D: PA-AY18(6	-12)-121912

 Qualifiers:
 ND - Not Detected at the Reporting Limit
 RL - Reporting / Quantitation Limit for the analysis

 Qualifiers:
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits

 B - Analyte detected in the associated Method Blank
 R - RPD outside accepted recovery limits

 HT - Sample received past holding time
 E - Value above quantitation range

 * - Non-accredited parameter
 H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

					1.000		
Client: Lab Order: Project: Lab ID:	Weston Solutions 12120653 20405.012.008.2038.00 12120653-018A), Pilsen Soil, SA	, Pilser	Tag	g Numbe ction Da	D: PA-AY19(12 r: te: 12/19/2012 4 x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW7471/	A		Prep	Date: 12/28/2012	Analyst: LB
Mercury		0.056	0.023	r	ng/Kg-dry	1	1/2/2013
Metals by ICP/MS		SW6020	(SW30	50B)	Prep	Date: 12/28/2012	Analyst: JG
Antimony		ND	24	1 P. 1 C. 1	ng/Kg-dry	100	12/31/2012
Arsenic		14	2.4	, in	ng/Kg-dry	20	12/29/2012
Barium		300	2.4	E. C.	ng/Kg-dry	20	12/29/2012
Cadmium		15	1.2	r	ng/Kg-dry	20	12/29/2012
Chromium		30	2.4	r.	ng/Kg-dry	20	12/29/2012
Copper		20000	60	n	ng/Kg-dry	200	12/29/2012
Lead		1600	1.2	T	ng/Kg-dry	20	12/29/2012
Selenium		2.9	2.4	n	ng/Kg-dry	20	12/29/2012
Silver		5:2	2.4	n	ng/Kg-dry	20	12/29/2012
Tin		710 J	12	* 1	ng/Kg-dry	20	12/29/2012
Zinc		4500	120	п	ng/Kg-dry	200	12/29/2012
pH (25 °C)		SW9045	C		Prep	Date: 12/28/2012	Analyst: RW
pH		7.8			pH Units	1	12/28/2012
Percent Moisture		D2974			Prep	Date: 12/28/2012	Analyst: RW
Percent Moisture		15.0	0.2	×.	wt%	1	12/29/2012

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Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

			_				N. 52 14444
Client:	Weston Solutions			Client S	ample I	D: PA-AY	19(12-24)-121912
Lab Order:	12120653			Tag	Numbe	er: Fine Gr	ained
Project:	20405.012.008.2038.00,	Pilsen Soil, S.	A, Pilse	n Collec	ction Da	te: 12/19/2	012 4:45:00 PM
Lab ID:	12120653-018B				Matri	ix: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
	y Asay Metals by ICP/MS			(SW3005A)	Pre	Date: 1/3/2	
Lead		13	0.025		mg/L	5	1/3/2013
Metals by ICP/I	MS	SW602	0 (SW3	050B)	Prep	Date: 1/3/2	013 Analyst: JG
Lead		2100	22	n	ng/Kg-dry	100	1/4/2013

Qualiflers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> Report Date: January 09, 2013 Print Date: January 09, 2013

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Client:	Weston Solutions			Client S	Sample I	D: PA-AY19(1	12-24)-121912
Lab Order:	12120653			Ta	g Numbe	r: Course Grai	ined
Project:	20405.012.008.2038.00), Pilsen Soil, SA	, Pilser	n Colle	ction Da	te: 12/19/2012	4:45:00 PM
Lab ID:	12120653-018C				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/I Lead	MS	SW6020	(SW30 18		Prep mg/Kg-dry	Date: 1/3/2013	Analyst: JG 1/4/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

			_		I TIUL DA	e: January 09.	, 2015
Client: Lab Order:	Weston Solutions 12120653				Sample I 1g Numbe	D: PA-AY05(r:	6-12)-121912
Project:	20405.012.008.2038.0	0, Pilsen Soil, S	A, Pilser	n Colle	ection Da	te: 12/19/2012	2 5:00:00 PM
Lab ID:	12120653-019A				Matri	x: Soil	
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
TCLP Mercury			1/7470A			Date: 1/2/2013	
Mercury		ND	0.0002		mg/L	1	1/2/2013
Mercury		SW747	'1A		Prep	Date: 12/28/20	12 Analyst: LB
Mercury		2.7	0.12		mg/Kg-dry	5	1/3/2013
Metals by ICP/M	AS	SW602	20 (SW30	50B)	Prep	Date: 12/28/20	12 Analyst: JG
Antimony		440 J	59		mg/Kg-dry	200	12/31/2012
Arsenic		73J	2.9		mg/Kg-dry	20	12/28/2012
Barium		2700	2.9		mg/Kg-dry	20	12/28/2012
Cadmium		36	1.5		mg/Kg-dry	20	12/28/2012
Chromium		94 J	2.9		mg/Kg-dry	20	12/28/2012
Copper		22000	74		mg/Kg-dry	200	12/29/2012
Lead		8800	59		mg/Kg-dry	200	12/29/2012
Selenium		5	2.9		mg/Kg-dry	20	12/28/2012
Silver		86	2.9		mg/Kg-dry	20	12/28/2012
Tin		1800 J	74		mg/Kg-dry	100	1/8/2013
Zinc		7300	150		mg/Kg-dry	200	12/29/2012
TCLP Metals by	ICP/MS	SW131	1/6020 (\$	SW3005A)	Prep	Date: 12/31/20	12 Analyst: JG
Arsenic		ND	0.01		mg/L	5	12/31/2012
Barium		2.5	0.5		mg/L	5	12/31/2012
Cadmium		0.24	0.005		mg/L	5	12/31/2012
Chromium		ND	0.01		mg/L	5	12/31/2012
Lead		9.6	0.005		mg/L	5	12/31/2012
Selenium		ND	0.01		mg/L	5	12/31/2012
Silver		ND	0.01		mg/L	5	12/31/2012
pH (25 °C)		SW904	5C		Prep	Date: 12/28/20	12 Analyst: RW
pН		7.6			pH Units	1	12/28/2012
Percent Moistu	re	D2974			Prep	Date: 12/28/20	112 Analyst: RW
Percent Moisture		26.9	0.2		wt%	1	12/29/2012

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Qualifiers:

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client S	ample I	D: PA-AY05(6	-12)-121912
Lab Order:	12120653					r: Fine Graine	
Project:	20405.012.008.2038.00,	Pilsen Soil, S	A, Pilse	n Collea	tion Da	te: 12/19/2012	5:00:00 PM
Lab ID:	12120653-019B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 92	200/6020	(SW3005A)	Prep	Date: 1/3/2013	Analyst: JG
Lead		39	0.025	*	mg/L	5	1/3/2013
Metals by ICP/	MS	SW602	0 (SW3	050B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		8400	5.2	п	ng/Kg-dry	100	1/3/2013

Qualifiers:	
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ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

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Client:	Weston Solutions			Client S	Sample I	D: PA-AY05(6	5-12)-121912
Lab Order:	12120653			Тар	y Numbe	r: Course Grai	ined
Project:	20405.012.008.2038.00	, Pilsen Soil, S	A, Pilsen	Colle	ction Da	te: 12/19/2012	5:00:00 PM
Lab ID:	12120653-019C				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/I	MS	SW602 26000	20 (SW30 22		Prep ng/Kg-dry	Date: 1/3/2013 100	Analyst: JG 1/4/2013

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: January 09, 2013 Print Date: January 09, 2013

Client: Lab Order:	Weston Solutions 12120653			Ta	g Numbe	r:	(12-24)-121912
Project:	20405.012.008.2038.00 12120653-020A	J, Pilsen Soil, SA	, Puser	Colle	A		2 5:05:00 PM
Lab ID:	12120653-020A					x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW7471/	A		Prep	Date: 12/28/2	012 Analyst: LB
Mercury		1.7	0.23		mg/Kg-dry	10	1/2/2013
Metals by ICP/MS		SW6020	(SW30	50B)	Prep	Date: 12/28/2	012 Analyst: JG
Antimony		1200	29	1	mg/Kg-dry	100	12/31/2012
Arsenic		93	2.9	r	mg/Kg-dry	20	12/29/2012
Barium		4300	2.9	r	mg/Kg-dry	20	12/29/2012
Cadmium		72	1.4	1	mg/Kg-dry	20	12/29/2012
Chromium		150	2.9	1	mg/Kg-dry	20	12/29/2012
Copper		12000	72	r	ng/Kg-dry	200	12/29/2012
Lead		16000	57	r	ng/Kg-dry	200	12/29/2012
Selenium		4.7	2.9	r	ng/Kg-dry	20	12/29/2012
Silver		23	2.9	r	ng/Kg-dry	20	12/29/2012
Tin		3200	290	* r	ng/Kg-dry	200	12/29/2012
Zinc		11000	140	- r	ng/Kg-dry	200	12/29/2012
pH (25 °C)		SW90450	C		Prep	Date: 12/28/2	012 Analyst: RW
pН		7.8			pH Units	1	12/28/2012
Percent Moisture		D2974			Prep	Date: 12/28/2	012 Analyst: RW
Percent Moisture		26.8	0.2		wt%	1	12/29/2012

 Qualifiers:
 ND - Not Detected at the Reporting Limit
 RL - Reporting / Quantitation Limit for the analysis

 Qualifiers:
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits

 B - Analyte detected in the associated Method Blank
 R - RPD outside accepted recovery limits

 HT - Sample received past holding time
 E - Value above quantitation range

 * - Non-accredited parameter
 H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

	- Next						
Client:	Weston Solutions			Client S	ample I	D: PA-AY07(12-24)-121912
Lab Order:	12120653			Тар	g Numbe	r: Fine Graine	d
Project:	20405.012.008.2038.00, 1	Pilsen Soil, SA	A, Pilse	n Collec	ction Da	te: 12/19/2012	2 5:05:00 PM
Lab ID:	12120653-020B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Bioaccessibility Lead	y Asay Metals by ICP/MS	EPA 92 46	00/6020	(SW3005A)	Prep mg/L	Date: 1/3/2013 5	Analyst: JG 1/3/2013
Metals by ICP/I	WS	SW6020) (SW3)	050B)	Prep	Date: 1/3/2013	Analyst: JG
Lead		9300	20		ng/Kg-dry	100	1/3/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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> Report Date: January 09, 2013 Print Date: January 09, 2013

Metals by ICP/I	AS	SW6020	(SW30		Prep	Date: 1/3/2013	Analyst: JG	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Lab ID:	12120653-020C				Matri	x: Soil		
Project:	20405.012.008.2038.00	Pilsen Soil, SA,	Pilser	n Collec	tion Da	te: 12/19/2012	5:05:00 PM	
Lab Order:	12120653			Tag	Numbe	r: Course Grai	ined	
Client:	Weston Solutions			Client S	Client Sample ID: PA-AY07(12-24)-121912			

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client	Sample T	D: PA-AC03(0-6	121012
Lab Order:	12120653)-121912
					ag Numbe		
Project:	20405.012.008.2038.00	, Pilsen Soil, SA	A, Pilser	n Colle	ection Da	te: 12/19/2012 5:	15:00 PM
Lab ID:	12120653-021A				Matri	ix: Soil	
Analyses		Result	RL	Qualifie	r Units	DF C	ate Analyzed
TCLP Mercury		SW131	/7470A		Prep	Date: 1/2/2013	Analyst: LB
Mercury		ND	0.0002		mg/L	1	1/2/2013
Mercury		SW7471	A		Prec	Date: 12/28/2012	Analyst: LB
Mercury		3.6	0.23		mg/L-dry	10	1/2/2013
Metals by ICP/M	AS	SW6020) (SW30	50B)	Prep	Date: 12/28/2012	Analyst: JG
Antimony		290 J	54		mg/Kg-dry	200	12/31/2012
Arsenic		44J	2.7		mg/Kg-dry	20	12/28/2012
Barium		1600	2.7		mg/Kg-dry	20	12/28/2012
Cadmium		42	1.3		mg/Kg-dry	20	12/28/2012
Chromium		260	2.7		mg/Kg-dry	20	12/28/2012
Copper		8400	67		mg/Kg-dry	200	12/29/2012
Lead		5600	5.4		mg/Kg-dry	20	12/28/2012
Selenium		3.5J	2.7		mg/Kg-dry	20	12/28/2012
Silver		41	2.7		mg/Kg-dry	20	12/28/2012
Tin		1100 J	130		mg/Kg-dry	200	1/8/2013
Zinc		8100	130		mg/Kg-dry	200	12/29/2012
CLP Metals by	ICP/MS	SW1311	/6020 (5	W3005A)	Prep	Date: 12/31/2012	Analyst: JG
Arsenic		ND	0.01		mg/L	5	12/31/2012
Barium		2.3	0.5		mg/L	5	12/31/2012
Cadmium		0.35	0.005		mg/L	5	12/31/2012
Chromium		ND	0.01		ing/L	5	12/31/2012
Lead		12	0.005		mg/L	5	12/31/2012
Selenium		ND	0.01		mg/L	5	12/31/2012
Silver		ND	0.01		mg/L	5	12/31/2012
oH (25 °C)		SW9045	iC		Prep	Date: 12/28/2012	Analyst: RW
pН		7.8			pH Units	1	12/28/2012
Percent Moistu	ге	D2974			Prep	Date: 12/28/2012	Analyst: RW
Percent Moisture		21.3	0.2	1.00	wt%	1	12/29/2012

Qualifiers:

- ND Not Detected at the Reporting Limit J - Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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> Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client Sample ID: PA-AC03(0-6)-121912					
Lab Order:	12120653			Tag	Tag Number: Fine Grained				
Project:	20405.012.008.2038.00,	08.2038.00, Pilsen Soil, SA, Pilsen Co			Collection Date: 12/19/2012 5:15:00 PM				
Lab ID:	12120653-021B				Matri	x: Soil			
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Bioaccessibility	y Asay Metals by ICP/MS	EPA 92	00/6020	(SW3005A)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		37	0.025		mg/L	5	1/3/2013		
Metals by ICP/I	MS	SW6020	(SW3)	050B)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		6600	22	n	ng/Kg-dry	100	1/3/2013		

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

					1997		
Client:	Weston Solutions			Client Sample ID: PA-AC03(0-6)-121912			
Lab Order:	12120653			Tag	Numbe	r: Course Gr	ained
Project:	20405.012.008.2038.00), Pilsen Soil, S.	A, Pilser	Collec	ction Da	te: 12/19/201	2 5:15:00 PM
Lab ID:	12120653-021C				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/I	MS	SW602	0 (SW30		Prep na/Ka-drv	Date: 1/3/201	3 Analyst: JG 1/3/2013

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

				_	1 - C			
Client:	Weston Solutions				100 C. 100		-AC04(0-6)-121912
Lab Order:	12120653			Ta	g Numbe	r;		
Project:	20405.012.008.2038.0	0, Pilsen Soil, S.	A, Pilsen	Colle	ection Da	te: 12/	/19/2012 5	20:00 PM
Lab ID:	12120653-022A				Matri	x: So	il	C
Analyses		Result	RL	Qualifie	r Units	DF	I	ate Analyzed
CLP Mercury		SW131	1/7470A		Prep	Date:	1/2/2013	Analyst: LB
Mercury		ND	0.0002		mg/L	1		1/2/2013
Aercury		SW747	IA		Prep	Date:	12/28/2012	Analyst: LB
Mercury		1.3	0.12		mg/Kg-dry	5		12/28/2012
letals by ICP/M	AS		0 (SW305	i0B)	Prep	Date:	12/28/2012	Analyst: JG
Antimony		78 J	5.2		mg/Kg-dry	20		12/28/2012
Arsenic		28	2.6		mg/Kg-dry	20		12/28/2012
Barium		980	2.6		mg/Kg-dry	20		12/28/2012
Cadmium		40	1.3		mg/Kg-dry	20		12/28/2012
Chromium		150	2.6		mg/Kg-dry	20		12/28/2012
Copper		5400	65		mg/Kg-dry	200		12/29/2012
Lead		5000	5.2		mg/Kg-dry	20		12/28/2012
Selenium		3.7	2.6		mg/Kg-dry	20		12/28/2012
Silver		19	2.6		mg/Kg-dry	20		12/28/2012
Tin		600	65		mg/Kg-dry	100	í.	12/31/2012
Zinc		14000	130		mg/Kg-dry	200		12/29/2012
CLP Metals by	ICP/MS	SW131*	1/6020 (SI	W3005A)	Prep	Date:	12/31/2012	Analyst: JG
Arsenic		ND	0.01		mg/L	5		12/31/2012
Barium		1.7	0.5		mg/L	5		12/31/2012
Cadmium		0.4	0.005		mg/L	5		12/31/2012
Chromium		ND	0.01		mg/L	5		12/31/2012
Lead		12	0.005		mg/L	5		12/31/2012
Selenium		ND	0.01		mg/L	5		12/31/2012
Silver		ND	0.01		mg/L	5		12/31/2012
H (25 °C)		SW904	SC		Prep	Date:	12/28/2012	Analyst: RW
pH		7.8			pH Units	1		12/28/2012
Percent Moistu	re	D2974			Prep	Date:	12/28/2012	Analyst: RW
Percent Moisture		18.0	0.2		wt%	1		12/29/2012

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions		-	Client S	Client Sample ID: PA-AC04(0-6)-121912			
Lab Order:	12120653			Tag Number: Fine Grained				
Project:	20405.012.008.2038.00,	D, Pilsen Soil, SA, Pilsen Collection Date: 12/19/2012 5:20:00 PM					5:20:00 PM	
Lab ID:	12120653-022B	Matrix: Soil						
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Bloaccessibility	y Asay Metals by ICP/MS	EPA 92 31	00/6020	(SW3005A)	Prep mg/L	Date: 1/3/2013 5	Analyst: JG 1/3/2013	
Metals by ICP/I	MS	SW602	0 (SW3	050B)	Prep	Date: 1/3/2013	Analyst: JG	

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Metals by ICP/M			20 (SW30			Date: 1/3/2013		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Lab ID:	12120653-022C		-		Matri	x: Soil		
Project:	20405.012.008.2038.00,	Pilsen Soil, S	A, Pilser	n Collea	ction Da	te: 12/19/2012	5:20:00 PM	
Lab Order:	12120653			Tag	Tag Number: Course Grained			
Client:	Weston Solutions			Client Sample ID: PA-AC04(0-6)-121912				

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions		0	liont Comple I	D: PA-AY03HS(0 6) 121012					
Lilent: Lab Order:	12120653		C			0-0)-121912					
				Tag Number							
Project:	20405.012.008.2038.00), Pilsen Soil, Sz	A, Pilsen		te: 12/19/2012 5	:30:00 PM					
Lab ID:	12120653-023A		Matrix: Soil								
Analyses		Result	RL Qu	alifier Units	DF I	Date Analyzed					
CLP Mercury		SW131*	1/7470A	2.000	Date: 1/2/2013	Analyst: LB					
Mercury		ND	0.0002	mg/L	1	1/2/2013					
Mercury		SW7471	A	Prep	Date: 12/28/2012	Analyst: LB					
Mercury		2.9	0.12	mg/Kg-dry	5	12/28/2012					
letals by ICP/I	MS		0 (SW3050B)	Prep	Date: 12/28/2012	Analyst: JG					
Antimony		13 J	4.8	mg/Kg-dry	20	12/28/2012					
Arsenic		51	2.4	mg/Kg-dry	20	12/28/2012					
Barium		630	2.4	mg/Kg-dry	20	12/28/2012					
Cadmium		17	1.2	mg/Kg-dry	20	12/28/2012					
Chromium		380	2.4	mg/Kg-dry	20	12/28/2012					
Copper		1500	61	mg/Kg-dry	200	12/29/2012					
Lead		2600	4.8	mg/Kg-dry	20	12/28/2012					
Selenium		4.6	2.4	mg/Kg-dry	20	12/28/2012					
Silver		3.1	2.4	mg/Kg-dry	20	12/28/2012					
Tin		190	61	* mg/Kg-dry	100	12/31/2012					
Zinc		4800	120	mg/Kg-dry	200	12/29/2012					
CLP Metals by	ICP/MS	SW1311	1/6020 (SW30	05A) Prep	Date: 12/31/2012	Analyst: JG					
Arsenic		ND	0.01	mg/L	5	12/31/2012					
Barium		1.8	0.5	mg/L	5	12/31/2012					
Cadmium		0.083	0.005	mg/L	5	12/31/2012					
Chromium		ND	0.01	mg/L	5	12/31/2012					
Lead		1.1	0.005	mg/L	5	12/31/2012					
Selenium		ND	0.01	mg/L	5	12/31/2012					
Silver		ND	0.01	mg/L	5	12/31/2012					
oH (25 °C)		SW9045	SC	Prep	Date: 12/28/2012	Analyst: RW					
рH		7.8		pH Units	1	12/28/2012					
Percent Moistu	re	D2974		Prep	Date: 12/28/2012	Analyst: RW					
Percent Moisture	6	18.0	0.2	* wt%	1	12/29/2012					

 ND - Not Detected at the Reporting Limit
 RL - Reporting / Quantitation Limit for the analysis

 Qualifiers:
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits

 B - Analyte detected in the associated Method Blank
 R - RPD outside accepted recovery limits

 HT - Sample received past holding time
 E - Value above quantitation range

 * - Non-accredited parameter
 H - Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

						A CONTRACTOR OF			
Client:	Weston Solutions			Client Sample ID: PA-AY03HS(0-6)-121912					
Lab Order:	12120653			Tag Number: Fine Grained					
Project:	20405.012.008.2038.00,	00, Pilsen Soil, SA, Pilsen Collection Date: 12/19/2012 5:30:00 PM					5:30:00 PM		
Lab ID:	12120653-023B	Matrix: Soil							
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Bioaccessibilit	y Asay Metals by ICP/MS	EPA 9	200/6020	(SW3005A)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		11	0.025	*	mg/L	5	1/3/2013		
Metals by ICP/	MS	SW602	20 (SW3	050B)	Prep	Date: 1/3/2013	Analyst: JG		
Lead		2300	21	r	ng/Kg-dry	100	1/3/2013		

Qualifiers:

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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Report Date: January 09, 2013 Print Date: January 09, 2013

Client:	Weston Solutions			Client Sample ID: PA-AY03HS(0-6)-121912				
Lab Order:	12120653				Tag Number: Course Grained			
Project:	20405.012.008.2038.00,	Pilsen Soil, SA	, Pilser	Colle	ction Dat	te: 12/19/2012	5:30:00 PM	
Lab ID:	12120653-023C		-		Matri	k: Soil		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Metals by ICP/MS		SW6020 (SW305		50B)	Prep	Date: 1/3/2013	Analyst: JG	
Lead		1400	21		mg/Kg-dry	100	1/3/2013	

Qualifiers:

- B Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

PILSEN AREA SOIL SITE CHICAGO, ILLINOIS DATA VALIDATION REPORT

Date: May 28, 2013
Laboratory: STAT Analysis Corporation (STAT), Chicago, Illinois
Laboratory Project #: 13050282
Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON[®]) Superfund Technical Assessment and Response Team (START)
Analytical TDD and Work Order #: S05-0001-1211-003/20405.016.001.2038.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 33 soil samples collected for the Pilsen Area Soil Site that were analyzed for the following parameters and U.S. Environmental Protection Agency methods:

- Total Metals by SW-846 Methods 6020 and 7471A
- Fine Grained Lead by SW-846 Method 6020
- Bioavailablity Lead by EPA Method 9200 and SW-846 Method 6020
- Toxicity Characteristic Leaching Procedure (TCLP) Lead by SW-846 Methods 1311 and 6020
- pH by SW-846 Method 9045C
- Moisture Content by ASTM D2974

A level II data package was requested from STAT. The data validation was conducted in general accordance with the EPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review" dated January 2010. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

TOTAL METALS AND FINE GRAINED LEAD BY EPA SW-846 METHODS 6020 AND 7471A AND BIOAVAILABLE LEAD BY EPA METHOD 9200 AND SW-846 METHOD 6020

1. <u>Samples</u>

Attachment A summarizes the samples for which this data validation is being conducted. It includes but the laboratory sample identification, the WESTON START sample identification, and the date and time of sample collection.

2. Holding Times

The samples were analyzed within the required holding time limit of 28 days for mercury and 180 days from sample collection to analysis for all other metals.

3. Blank Results

Method blanks were analyzed with the metals analyses. The blanks contained no metals contamination above the reporting limits. There were detections of some metals below the reporting limits in the blanks. However, the sample results were much greater or contained no detections of these metals. No qualifications were required.

4. <u>Laboratory Control Sample (LCS) Results</u>

The LCS recoveries were within the quality control (QC) limits except for as follows.

In one LCS, antimony was detected high. Detected antimony results associated with this LCS were flagged "J" as estimated.

5. Matrix Spike (MS) and MS Duplicate (MSD) Results

STAT analyzed several site-specific MS/MSDs. The percent recoveries and relative percent differences (RPD) were within QC limits except for as follows.

In many instances of QC limits not being met, the sample concentration was more than four times the spike amount. In these instances, no qualifications were required.

In the MS and MSD of sample PA-RR14,15,16(0-6)-050613, the antimony recovery was low. The antimony result in this sample was flagged "J" as estimated.

In the MS and MSD of sample PA-351-01(0-6)-050713, the copper recovery was high and the antimony recovery was low. The copper result in this sample was flagged "J" and the quantiation limit for antimony was flagged "UJ" as estimated.

6. <u>Field Duplicate Results</u>

There are two field duplicate samples associated with this work order that are identified by a "D" suffix in the sample name.

The field duplicate results were evaluated by calculating the RPDs between the investigative and field duplicate sample results. There is no established QC limit for RPD for field duplicates; however, 50 RPD is generally used for evaluation. The RPDs for detected metals were below 50 which is acceptable.

7. Overall Assessment

The metals data are acceptable for use as qualified based on the information received.

TCLP METALS BY EPA SW-846 METHODS 1311 AND 6020

1. <u>Samples</u>

Attachment A summarizes the samples for which this data validation is being conducted. It includes but the laboratory sample identification, the WESTON START sample identification, and the date and time of sample collection.

2. Holding Times

The samples were analyzed within the required holding time limit of 180 days from sample collection.

3. Blank Results

Method blanks were analyzed with the metals analyses. Some of the blanks contained some minor lead contamination. However, the TCLP lead results were much greater than the blank results and no qualifications were required.

4. LCS Results

The LCS recoveries were within the QC limits.

5. <u>MS and MSD Results</u>

STAT analyzed two site-specific MS/MSD samples. The percent recoveries and RPDs were within QC limits except for as follows.

6. <u>Field Duplicate Results</u>

There are two field duplicate samples associated with this work order that are identified by a "D" suffix in the sample name.

The field duplicate results were evaluated by calculating the RPDs between the investigative and field duplicate sample results. There is no established QC limit for RPD for field duplicates; however, 50 RPD is generally used for evaluation. The RPD for one of the field duplicates was below 50 which is acceptable. The RPD for field duplicate PA-RR01,02(6-24)050613D had a high RPD of 134 indicating sample heterogeneity associated with TCLP lead in this sample.

7. **Overall Assessment**

The TCLP lead data are acceptable for use as qualified based on the information received.

GENERAL CHEMISTRY PARAMETERS (pH by SW-846 Method 9045C and Moisture Content by ASTM D2974)

1. <u>Samples</u>

Attachment A summarizes the samples for which this data validation is being conducted. It includes but the laboratory sample identification, the WESTON START sample identification, and the date and time of sample collection.

2. <u>Holding Times</u>

The holding time for pH is "as soon as possible" and the holding time for moisture is 28 days. The holding time for moisture was met. For pH, the samples were analyzed approximately 6-7 days from sample collection. No qualifications were applied.

3. Blank Results

Method blanks were analyzed with the moisture analyses and were all non-detect for moisture which is acceptable.

4. LCS Results

LCSs were analyzed with the moisture analyses. The LCS recoveries were within the QC limits.

5. <u>Laboratory Duplicates</u>

Laboratory duplicates were analyzed with the pH and moisture analyses. The RPDs were within QC limits.

6. <u>Field Duplicate Results</u>

There are two field duplicate samples associated with this work order that are identified by a "D" suffix in the sample name.

The field duplicate results were evaluated by calculating the RPDs between the investigative and field duplicate sample results. The RPDs were below 50 which is acceptable.

7. Overall Assessment

The pH and moisture data are acceptable for use as qualified based on the information received.

ATTACHMENT A

SAMPLE LIST

Client:	Weston Solutions
Project:	Pilsen Soil Site, Pilsen, Chicago, IL
Lab Order:	13050282

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13050282-001A	PA-RR14,15,16(0-6)-050613		5/6/2013 3:40:00 PM	5/7/2013
13050282-001B	PA-RR14,15,16(0-6)-050613	Fine Grained	5/6/2013 3:40:00 PM	5/3/2013
13050282-002A	PA-RR14,15,16(6-24)-05061	3	5/6/2013 3:50:00 PM	5/7/2013
13050282-002B	PA-RR14,15,16(6-24)-05061	3Fine Grained	5/6/2013 3:50:00 PM	5/7/2013
13050282-003A	PA-RR11,13(0-6)-050613		5/6/2013 4:00:00 PM	5/7/2013
13050282-003B	PA-RR11,13(0-6)-050613	Fine Grained	5/6/2013 4:00:00 PM	5/7/2013
13050282-004A	PA-RR11,13(6-24)-050613		5/6/2013 4:05:00 PM	5/7/2013
13050282-004B	PA-RR11,13(6-24)-050613	Fine Grained	5/6/2013 4:05:00 PM	5/7/2013
13050282-005A	PA-RR10,12(0-6)-050613		5/6/2013 4:15:00 PM	5/7/2013
13050282-005B	PA-RR10,12(0-6)-050613	Fine Grained	5/6/2013 4:15:00 PM	5/7/2013
13050282-006A	PA-RR10,12(6-24)-050613		5/6/2013 4:20:00 PM	5/7/2013
13050282-006B	PA-RR10,12(6-24)-050613	Fine Grained	5/6/2013 4:20:00 PM	5/7/2013
13050282-007A	PA-RR07,08(0-6)-050613		5/6/2013 4:30:00 PM	5/7/2013
13050282-007B	PA-RR07,08(0-6)-050613	Fine Grained	5/6/2013 4:30:00 PM	5/7/2013
13050282-008A	PA-RR07,08(6-24)-050613		5/6/2013 4:35:00 PM	5/7/2013
13050282-008B	PA-RR07,08(6-24)-050613	Fine Grained	5/6/2013 4:35:00 PM	5/7/2013
13050282-009A	PA-RR01,02(0-6)-050613		5/6/2013 4:40:00 PM	5/7/2013
13050282-009B	PA-RR01,02(0-6)-050613	Fine Grained	5/6/2013 4:40:00 PM	5/7/2013
13050282-010A	PA-RR01,026-24)-050613		5/6/2013 4:45:00 PM	5/7/2013
13050282-010B	PA-RR01,026-24)-050613	Fine Grained	5/6/2013 4:45:00 PM	5/7/2013
13050282-011A	PA-RR04,06(0-6)-050613		5/6/2013 4:55:00 PM	5/7/2013
13050282-011B	PA-RR04,06(0-6)-050613	Fine Grained	5/6/2013 4:55:00 PM	5/7/2013
13050282-011C	PA-RR04,06(0-6)-050613	Course Grained	5/6/2013 4:55:00 PM	5/7/2013
13050282-012A	PA-RR04,06(6-24)-050613		5/6/2013 5:00:00 PM	5/7/2013
13050282-012B	PA-RR04,06(6-24)-050613	Fine Grained	5/6/2013 5:00:00 PM	5/7/2013
13050282-013A	PA-RR01,02(6-24)-050613D		5/6/2013 4:50:00 PM	5/7/2013
13050282-013B	PA-RR01,02(6-24)-050613D	Fine Grained	5/6/2013 4:50:00 PM	5/7/2013
13050282-014A	PA-375-01(0-6)-050713D		5/7/2013 9:40:00 AM	5/7/2013
13050282-014B	PA-375-01(0-6)-050713D	Fine Grained	5/7/2013 9:40:00 AM	5/7/2013
13050282-014C	PA-375-01(0-6)-050713D	Course Grained	5/7/2013 9:40:00 AM	5/7/2013
13050282-015A	PA-375-02(0-12)-050713		5/7/2013 9:45:00 AM	5/7/2013
13050282-015B	PA-375-02(0-12)-050713	Fine Grained	5/7/2013 9:45:00 AM	5/7/2013
13050282-016A	PA-370-01(0-6)-050713		5/7/2013 10:45:00 AM	5/7/2013
13050282-016B	PA-370-01(0-6)-050713	Fine Grained	5/7/2013 10:45:00 AM	5/7/2013
13050282-017A	PA-370-01(0-6)-050713D		5/7/2013 10:50:00 AM	5/7/2013
13050282-017B	PA-370-01(0-6)-050713D	Fine Grained	5/7/2013 10:50:00 AM	5/7/2013
13050282-018A	PA-370-02(0-6)-050713		5/7/2013 10:55:00 AM	5/7/2013
13050282-018B	PA-370-02(0-6)-050713	Fine Grained	5/7/2013 10:55:00 AM	5/7/2013

Client:Weston SolutionsProject:Pilsen Soil Site, Pilsen, Chicago, ILLab Order:13050282

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13050282-019A	PA-370-02(6-12)-050713		5/7/2013 11:00:00 AM	5/7/2013
13050282-019B	PA-370-02(6-12)-050713	Fine Grained	5/7/2013 11:00:00 AM	5/7/2013
13050282-020A	PA-369-01(0-6)-050713		5/7/2013 12:20:00 PM	5/7/2013
13050282-020B	PA-369-01(0-6)-050713	Fine Grained	5/7/2013 12:20:00 PM	5/7/2013
13050282-021A	PA-369-01(0-2)-050713		5/7/2013 12:15:00 PM	5/7/2013
13050282-021B	PA-369-01(0-2)-050713	Fine Grained	5/7/2013 12:15:00 PM	5/7/2013
13050282-022A	PA-369-02(0-12)-050713		5/7/2013 12:25:00 PM	5/7/2013
13050282-022B	PA-369-02(0-12)-050713	Fine Grained	5/7/2013 12:25:00 PM	5/7/2013
13050282-023A	PA-369-03,04(0-6)-050713		5/7/2013 12:30:00 PM	5/7/2013
13050282-023B	PA-369-03,04(0-6)-050713	Fine Grained	5/7/2013 12:30:00 PM	5/7/2013
13050282-024A	PA-371-01(0-6)-050713		5/7/2013 2:15:00 PM	5/7/2013
13050282-024B	PA-371-01(0-6)-050713	Fine Grained	5/7/2013 2:15:00 PM	5/7/2013
13050282-025A	PA-371-02(0-6)-050713		5/7/2013 2:20:00 PM	5/7/2013
13050282-025B	PA-371-02(0-6)-050713	Fine Grained	5/7/2013 2:20:00 PM	5/7/2013
13050282-026A	PA-371-02(0-6)-050713D		5/7/2013 2:25:00 PM	5/7/2013
13050282-026B	PA-371-02(0-6)-050713D	Fine Grained	5/7/2013 2:25:00 PM	5/7/2013
13050282-027A	PA-349-01(0-6)-050713		5/7/2013 3:20:00 PM	5/7/2013
13050282-027B	PA-349-01(0-6)-050713	Fine Grained	5/7/2013 3:20:00 PM	5/7/2013
13050282-028A	PA-349-02(0-12)-050713		5/7/2013 3:25:00 PM	5/7/2013
13050282-028B	PA-349-02(0-12)-050713	Fine Grained	5/7/2013 3:25:00 PM	5/7/2013
13050282-029A	PA-349-03(0-6)-050713		5/7/2013 4:30:00 PM	5/7/2013
13050282-029B	PA-349-03(0-6)-050713	Fine Grained	5/7/2013 4:30:00 PM	5/7/2013
13050282-030A	PA-351-01(0-6)-050713		5/7/2013 3:45:00 PM	5/7/2013
13050282-030B	PA-351-01(0-6)-050713	Fine Grained	5/7/2013 3:45:00 PM	5/7/2013
13050282-031A	PA-141-01(0-6)-050713		5/7/2013 5:40:00 PM	5/7/2013
13050282-031B	PA-141-01(0-6)-050713	Fine Grained	5/7/2013 5:40:00 PM	5/7/2013
13050282-032A	PA-141-02(0-6)-050713		5/7/2013 5:45:00 PM	5/7/2013
13050282-032B	PA-141-02(0-6)-050713	Fine Grained	5/7/2013 5:45:00 PM	5/7/2013
13050282-033A	PA-141-03(0-6)-050713		5/7/2013 5:50:00 PM	5/7/2013
13050282-033B	PA-141-03(0-6)-050713	Fine Grained	5/7/2013 5:50:00 PM	5/7/2013

Data Validation Report Pilsen Area Soil Site STAT Analysis Corporation Laboratory Project #: 13050282

ATTACHMENT B

STAT ANALYSIS CORPORATION RESULTS SUMMARY WITH QUALIFIERS

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Print Date: May 23, 2013 Client: Weston Solutions Client Sample ID: PA-RR14,15,16(0-6)-050613 Lab Order: 13050282 **Tag Number: Project:** Pilsen Soil Site, Pilsen, Chicago, IL Collection Date 5/6/2013 3:40:00 PM Lab ID: Matrix: Soil 13050282-001A Analyses Result RL **Qualifier** Units DF **Date Analyzed** SW7471A Prep Date: 5/13/2013 Analyst: LB Mercury Mercury 1.2 0.2 mg/Kg-dry 10 5/13/2013 Metals by ICP/MS SW6020 (SW3050B) Prep Date: 5/13/2013 Analyst: JG Antimony 4.7 5 4.3 mg/Kg-dry 20 5/14/2013 Cadmium 9.5 1.1 mg/Kg-dry 20 5/14/2013 Chromium 900 2.2 mg/Kg-dry 20 5/14/2013 770 5.4 20 5/14/2013 Copper mg/Kg-dry 1500 1.1 20 5/14/2013 Lead mg/Kg-dry 130 20 Tin 11 5/14/2013 mg/Kg-dry 54 Zinc 5800 mg/Kg-dry 100 5/14/2013 **TCLP Metais by ICP/MS** SW1311/6020 (SW3005A) Prep Date: 5/12/2013 Analyst: JG 5/12/2013 Lead 0.75 0.005 mg/L 5 pH (25 °C) SW9045C Prep Date: 5/14/2013 Analyst: PBG 5/14/2013 pH 8.2 pH Units 1 Percent Moisture D2974 Prep Date: 5/11/2013 Analyst: RW Percent Moisture 0.2 5/11/2013 11.8 wt% 1

Report Date: May 23, 2013

ZN 5/28/13

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: V	Weston Solutions	Client Sample ID: PA-RR14,15,16(0-6)-050613
Lab Order: 1	3050282	Tag Number: Fine Grained
Project: P	Pilsen Soil Site, Pilsen, Chicago, IL	Collection Date 5/6/2013 3:40:00 PM
Lab ID: 1	3050282-001B	Matrix: Soil
Analyses	Result	RL Qualifier Units DF Date Analyzed

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

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Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, IL		Ti	ng Numbe	r:	4,15,16(6-24)-050613 3:50:00 PM
Lab ID:	13050282-002A				Matri	x: Soil	
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 5/13/2	013 Analyst: LB
Mercury		0.78	0.04		mg/Kg-dry	2	5/13/2013
Metals by ICP/I	//S	SW60	20 (SW30	50B)	Prep	Date: 5/13/2	013 Analyst: JG
Antimony		5.2 J	4.5		mg/Kg-dry	20	5/14/2013
Cadmium		11	1.1		mg/Kg-dry	20	5/14/2013
Chromium		2000	2.3		mg/Kg-dry	20	5/14/2013
Copper		900	5.7		mg/Kg-dry	20	5/14/2013
Lead		2200	1.1		mg/Kg-dry	20	5/14/2013
Tin		120	11		mg/Kg-dry	20	5/14/2013
Zinc		4700	57		mg/Kg-dry	100	5/14/2013
TCLP Metals by	ICP/MS	SW13	1/6020 (5	SW3005A)	Prep	Date: 5/12/2	013 Analyst: JG
Lead		0.35	0.005		mg/L	5	5/12/2013
pH (25 °C)		SW904	15C		Prep	Date: 5/14/2	013 Analyst: PBG
рН		7.9			pH Units	1	5/14/2013
Percent Moistu	re	D2974			Prep	Date: 5/11/2	013 Analyst: RW
Percent Moisture	1 () () () () () () () () () (16.6	0.2		wt%	1	5/11/2013

23/28/13

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions	Client Sample ID: PA-RR14,15,16(6-24)-05061						
Lab Order:	13050282	Tag Number: Fine Grained						
Project:	Pilsen Soil Site, Pilsen, C	Site, Pilsen, Chicago, IL			Collection Date 5/6/2013 3:50:00 PM			
Lab ID:	13050282-002B	Matrix: Soil .				*		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Metals by ICP/	MS	SW602 2200	0 (SW30		Prep ng/Kg-dry	Date: 5/19	9/2013 Analyst: JG 5/19/2013	

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, IL		Ti	ng Numbe	D: PA-RR11,1: r: te 5/6/2013 4:0	
Lab ID:	13050282-003A	0				x: Soil	
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 5/13/2013	Analyst: LB
Mercury		0.55	0.02		mg/Kg-dry	1	5/13/2013
Metals by ICP/	VIS	SW60:	20 (SW30)50B)	Prep	Date: 5/13/2013	Analyst: JG
Antimony		6.4 J	4.6		mg/Kg-dry	20	5/14/2013
Cadmium		9.3	5.7		mg/Kg-dry	100	5/13/2013
Chromium		220	11		mg/Kg-dry	100	5/13/2013
Copper		650	5.7		mg/Kg-dry	20	5/14/2013
Lead		940	11		mg/Kg-dry	100	5/13/2013
Tin		70	11	*	mg/Kg-dry	20	5/14/2013
Zinc		2200	57		mg/Kg-dry	100	5/14/2013
TCLP Metals by	ICP/MS	SW131	1/6020 (SW3005A)	Prep	Date: 5/12/2013	Analyst: JG
Lead		0.13	0.005		mg/L	5	5/12/2013
pH (25 °C)		SW904	15C		Prep	Date: 5/14/2013	Analyst: PBG
pН		7.9			pH Units	1	5/14/2013
Percent Moistu	re	D2974			Prep	Date: 5/11/2013	Analyst: RW
Percent Moisture	3	13.0	0.2	*	wt%	1	5/11/2013

2 N 5|28| 13

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

0.00								
Client:	Weston Solutions	Client Sample ID: PA-RR11,13(0-6)-050613						
Lab Order:	13050282	282			Tag Number: Fine Grained			
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Da	te 5/6/201	3 4:00:00 PM	
Lab ID:	13050282-003B				Matri	x: Soil		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyze	

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order:	Weston Solutions 13050282			T	ag Numbe	r:	3(6-24)-050613
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Coll		te 5/6/2013 4:	05:00 PM
Lab ID:	13050282-004A				Matri	x: Soil	-
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 5/13/2013	Analyst: LB
Mercury		0.58	0.02		mg/Kg-dry	1	5/13/2013
Metals by ICP/I	WS	SW60	20 (SW30	50B)	Prep	Date: 5/13/2013	Analyst: JG
Antimony		8.8 J	4.5		mg/Kg-dry	20	5/14/2013
Cadmium		8.6	5.6		mg/Kg-dry	100	5/13/2013
Chromium		43	11		mg/Kg-dry	100	5/13/2013
Copper		360	5.6		mg/Kg-dry	20	5/14/2013
Lead		1000	11		mg/Kg-dry	100	5/13/2013
Tin		110	11	*	mg/Kg-dry	20	5/14/2013
Zinc		1100	56		mg/Kg-dry	100	5/14/2013
TCLP Metals by	ICP/MS	SW131	1/6020 (5	SW3005A)	Prep	Date: 5/12/2013	Analyst: JG
Lead		0.022	0.005		mg/L	5	5/12/2013
pH (25 °C)		SW904	45C		Prep	Date: 5/14/2013	Analyst: PBG
рН		7.9			pH Units	1	5/14/2013
Percent Moistu	re	D2974			Prep	Date: 5/11/2013	Analyst: RW
Percent Moisture	2	15.3	0.2	*	wt%	1	5/11/2013

21/5/28/13

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

a							12
Client:	Weston Solutions	Client Sample ID: PA-RR11,13(6-24)-05061					
Lab Order:	13050282	Tag Number: Fine Grained					
Project:	Pilsen Soil Site, Pilsen, C	hicago, IL		Colle	ction Day	te 5/6/2013	4:05:00 PM
Lab ID:	13050282-004B				Matri	k: Soil	-
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/I	MS	SW6020 980	(SW30 9.9		Prep mg/Kg-dry	Date: 5/19/20 100	13 Analyst: JG 5/19/2013

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter
 - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

						and the second sec		
Client: Lab Order: Project: Lab ID:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen, 13050282-005A	n, Chicago, IL Collection Date 5/6/2013 4:15:00 PM Matrix: Soil						
Analyses	13030282-003A	Result	RL	Oualifie	2003000	DF	Date Analyzed	
Mercury Mercury		SW74 1.1	71A 0.22		1.4	Date: 5/13/201: 10	and the second s	
Metals by ICP/I Antimony	MS	SW60	4.5		mg/Kg-dry	Date: 5/13/201 3 20	5/14/2013	
Cadmium Chromium		17 53 1000	5.6 11 5.6		mg/Kg-dry mg/Kg-dry	100 100 20	5/13/2013 5/13/2013 5/14/2013	
Copper Lead Tin		1800 150	5.0 11 11		mg/Kg-dry mg/Kg-dry mg/Kg-dry	100	5/13/2013 5/13/2013 5/14/2013	
Zinc		3800	56		mg/Kg-dry	100	5/14/2013	
TCLP Metals by Lead	y ICP/MS	SW13 0.52	11/6020 (\$ 0.005	SW3005A)	Prep mg/L	Date: 5/14/2013 5	Analyst: JG 5/14/2013	
pH (25 °C) pH		SW90 8.0	45C		Prep pH Units	Date: 5/14/2013 1	Analyst: PBG 5/14/2013	
Percent Moisture		D2974 15.3	0.2		Prep wt%	Date: 5/11/2013	Analyst: RW 5/11/2013	

XB 5|28|13

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Metals by ICP/I	AS	SW6020	(SW30	50B)	Prep	Date: 5/19/2	2013 Analyst: JG
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Lab ID:	13050282-005B		-		Matri	k: Soil	
Project:	Pilsen Soil Site, Pilsen, (Collection Date 5/6/2013 4:15:00 PM					
Lab Order:	13050282		Tag Number: Fine Grained				
Client:	Weston Solutions		Client Sample ID: PA-RR10,12(0-6)-050613				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

		ini i								
Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, II		Client Sample ID: PA-RR10,12(6-24)-050613 Tag Number: Collection Date 5/6/2013 4:20:00 PM						
Lab ID:	13050282-006A					Matri	x: Soil			
Analyses		Resu	t R	L	Qualifie	r Units	DF	Dat	e Analyzed	
Mercury		SV	V7471A			Prep	Date: 5/13/	2013 A	nalyst: LB	
Mercury		1.5	0.2	1		mg/Kg-dry	10		/13/2013	
Metals by ICP/I	VIS	SV	V6020 (SW	130	50B)	Prep	Date: 5/13/2	2013 A	nalyst: JG	
Antimony		34	J 4	.8		mg/Kg-dry	20		5/14/2013	
Cadmium		12	5	.9		mg/Kg-dry	100	5	5/13/2013	
Chromium		35	1	2		mg/Kg-dry	100	5	5/13/2013	
Copper		980	5	.9		mg/Kg-dry	20	5	/14/2013	
Lead		2400	1	2		mg/Kg-dry	100	5	/13/2013	
Tin		170	1	2	*	mg/Kg-dry	20	5	/14/2013	
Zinc		2200	5	9		mg/Kg-dry	100	Ę	/14/2013	
TCLP Metals by	y ICP/MS	SV	/1311/6020	(S	W3005A)	Prep	Date: 5/14/2	2013 A	nalyst: JG	
Lead		0.68	0.00	5		mg/L	5	5	/15/2013	
pH (25 °C)		SV	/9045C			Prep	Date: 5/14/2	2013 A	nalyst: PBC	
pН		7.9				pH Units	1	5	/14/2013	
Percent Moistu	re	D2	974			Prep	Date: 5/11/2	2013 A	nalyst: RW	
Percent Moisture	9	22.2	0.	2	*	wt%	1		/11/2013	

219 S|28/13

Qualifiers:

- ND Not Detected at the Reporting Limit
 J Analyte detected below quantitation limits
 B Analyte detected in the associated Method Blank
 HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Metals by ICP/MS SW602			20 (SW3050B) Prep Date: 5/19/2013 Analyst: JG				
	Result	RL	Qualifier	Units	DF	Date Analyzed	
13050282-006B			-	Matri	x: Soil		
Pilsen Soil Site, Pilsen,	Chicago, IL		Collec	ction Da	te 5/6/201	3 4:20:00 PM	
13050282			Tag	Numbe	r: Fine Gr	ained	
Weston Solutions			Client S	ample Il	D: PA-RR	10,12(6-24)-050613	
	13050282 Pilsen Soil Site, Pilsen,	13050282 Pilsen Soil Site, Pilsen, Chicago, IL 13050282-006B	13050282 Pilsen Soil Site, Pilsen, Chicago, IL 13050282-006B	13050282TagPilsen Soil Site, Pilsen, Chicago, ILCollect13050282-006BCollect	13050282Tag NumberPilsen Soil Site, Pilsen, Chicago, ILCollection Date13050282-006BMatrix	13050282Tag Number: Fine GrPilsen Soil Site, Pilsen, Chicago, ILCollection Date 5/6/20113050282-006BMatrix: Soil	

Lead 2300 9.4 mg/Kg-dry 100 5/19/2013

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

	202						and share the state
Client:	Weston Solutions						8(0-6)-050613
Lab Order:	13050282			Ti	ng Numbe	r:	
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Coll	ection Da	te 5/6/2013 4:	30:00 PM
Lab ID:	13050282-007A				Matri	x: Soil	
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW7471	4		Prep	Date: 5/13/201	3 Analyst: LB
Mercury		0.72	0.022		mg/Kg-dry	1	5/13/2013
Metals by ICP/I	WS	SW6020	(SW30	50B)	Prep	Date: 5/13/201	3 Analyst: JG
Antimony		12 J	4.1		mg/Kg-dry	20	5/14/2013
Cadmium		71	5.1		mg/Kg-dry	100	5/13/2013
Chromium		45	10		mg/Kg-dry	100	5/13/2013
Copper		6500	250		mg/Kg-dry	1000	5/14/2013
Lead		6800	10		mg/Kg-dry	100	5/13/2013
Tin		540	10	*	mg/Kg-dry	20	5/14/2013
Zinc		46000	510		mg/Kg-dry	1000	5/14/2013
TCLP Metals by	ICP/MS	SW1311/	6020 (SW3005A)	Prep	Date: 5/14/201:	3 Analyst: JG
Lead		3.6	0.005		mg/L	5	5/15/2013
pH (25 °C)		SW9045	C		Prep	Date: 5/14/201:	Analyst: PBG
рH		8.4			pH Units	1	5/14/2013
Percent Moistu	re	D2974			Prep	Date: 5/11/201:	Analyst: RW
Percent Moisture	9	8.9	0.2	*	wt%	1	5/11/2013

ZB S|28|13

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time

" - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

					a a a a a a a a a a a a	or may 25	, 2010
Client:	Weston Solutions			Client S	Sample II	D: PA-RR	07,08(0-6)-050613
Lab Order:	13050282			Ta	g Number	r: Fine Gr	ained
Project:	Pilsen Soil Site, Pilsen, C	hicago, IL		Colle	ction Dat	te 5/6/201	3 4:30:00 PM
Lab ID:	13050282-007B	Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/I	MS	SW6020 7900	(SW3) 9.8		Prep ng/Kg-dry	Date: 5/19	/2013 Analyst: JG 5/19/2013

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order:	Weston Solutions 13050282			Client Sample ID: PA-RR07,08(6-24)-050613 Tag Number:							
		Chierre II				te 5/6/2013 4:3	5.00 DM				
Project:	Pilsen Soil Site, Pilsen,	, Chicago, IL		Con			55:00 PM				
Lab ID:	13050282-008A				Matri	x: Soil					
Analyses	10 M × 12	Result	RL	Qualifie	r Units	DF	Date Analyzed				
Mercury		SW74	171A		Prep	Date: 5/13/2013	Analyst: LB				
Mercury		0.65	0.02		mg/Kg-dry	1	5/13/2013				
Metals by ICP/I	MS	SW60	20 (SW30	50B)	Prep	Date: 5/13/2013	Analyst: JG				
Antimony		9 J	4.5		mg/Kg-dry	20	5/14/2013				
Cadmium		49	5.7		mg/Kg-dry	100	5/13/2013				
Chromium		43	11		mg/Kg-dry	100	5/13/2013				
Copper		3700	280		mg/Kg-dry	1000	5/14/2013				
Lead		5500	11		mg/Kg-dry	100	5/13/2013				
Tin		450	11		mg/Kg-dry	20	5/14/2013				
Zinc		24000	570		mg/Kg-dry	1000	5/14/2013				
TCLP Metals by	y ICP/MS	SW13	11/6020 (SW3005A)	Prep	Date: 5/14/2013	Analyst: JG				
Lead		13	0.005		mg/L	5	5/15/2013				
pH (25 °C)		SW90	45C		Prep	Date: 5/14/2013	Analyst: PBC				
pН		9.1			pH Units	1	5/14/2013				
Percent Moistu	re	D297	4		Prep	Date: 5/11/2013	Analyst: RW				
Percent Moisture	a	19.0	0.2	*	wt%	1	5/11/2013				

ZN 5|28|13

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time

- Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Metals by ICP/MS SW602			020 (SW3050B) Prep Date: 5/19/2013 Analyst: JG					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Lab ID:	13050282-008B		Matrix: Soil					
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Collec	ction Da	te 5/6/201	13 4:35:00 PM	
Lab Order:	13050282			Tag	Numbe	r: Fine Gr	ained	
Client:	Weston Solutions			Client S	ample I	D: PA-RR	07,08(6-24)-050613	

Lead 9500 9.9

J (SW3050B) Prep Date: 5/19/2013 Analyst: J 9.9 mg/Kg-dry 100 5/19/2013

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Manual dia dia manual
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

					Print Dat	te: May 23, 201	3
Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, IL		T	ag Numbe ection Da	te 5/6/2013 4:4	
Lab ID: Analyses	13050282-009A	Result	RL	Qualifie	0.010.010.10	x: Soil DF	Date Analyzed
Mercury Mercury		SW7471 , 0.52	A 0.023		Prep mg/Kg-dry	Date: 5/13/2013	Analyst: LB 5/13/2013
Metals by ICP/M Antimony Cadmium Chromium Copper Lead Tin Zinc	NS	SW6020 19 J 16 64 9400 4000 1300 26000	(SW30 3.9 4.9 9.8 240 9.8 9.8 9.8 490	950B) *	Prep mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry	Date: 5/13/2013 20 100 100 1000 1000 20 1000	Analyst: JG 5/14/2013 5/13/2013 5/13/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013
TCLP Metals by Lead	ICP/MS	0.87	0.005	SW3005A)	mg/L	Date: 5/14/2013 5	5/15/2013
pH (25 °C) pH Percent Moistu Percent Moisture		SW9045 (8.0 D2974 14.3	0.2		pH Units	Date: 5/14/2013 1 Date: 5/11/2013	5/14/2013

Report Date: May 23, 2013 Print Date: May 23, 2013

211 S|28/13

Qualifiers:

- ND Not Detected at the Reporting Limit J - Analyte detected below quantitation limits
- B Analyte detected betow quantitation minis B- Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions			Client S	Sample II	D: PA-RR	01,02(0-6)-050613	
Lab Order:	13050282			Ta	g Number	r: Fine Gra	ained	
Project:	Pilsen Soil Site, Pilsen, Ch	icago, IL		Colle	ction Da	te 5/6/201	3 4:40:00 PM	
Lab ID:	13050282-009B		Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Metals by ICP/N Lead	NS	SW6020 4100	(SW30 9.7		Prep ng/Kg-dry	Date: 5/19/	2013 Analyst: JG 5/19/2013	

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date:	May 23, 2013
Print Date:	May 23, 2013

Client:	Weston Solutions				1000 TO 100	2. 2. 2. 2	26-24)-050613
Lab Order:	13050282			T	ag Numbe	r:	
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Coll	ection Da	te 5/6/2013 4:	45:00 PM
Lab ID;	13050282-010A			_	Matri	x: Soil	
Analyses		Result	RL	Qualifie	er Units	DF	Date Analyzed
Mercury		SW7471	A		Prep	Date: 5/13/201	3 Analyst: LB
Mercury		0.63	0.022		mg/Kg-dry	1	5/13/2013
Metals by ICP/I	MS	SW6020) (SW30	050B)	Prep	Date: 5/13/201:	Analyst: JG
Antimony		7.4 J	4.3		mg/Kg-dry	20	5/14/2013
Cadmium		6.1	1.1		mg/Kg-dry	20	5/14/2013
Chromium		34	2.1		mg/Kg-dry	20	5/14/2013
Copper		3700	270		mg/Kg-dry	1000	5/14/2013
Lead		1700	11		mg/Kg-dry	100	5/13/2013
Tin		560	11	*	mg/Kg-dry	20	5/14/2013
Zinc		17000	530		mg/Kg-dry	1000	5/14/2013
TCLP Metals by	y ICP/MS	SW1311	/6020 (SW3005A)	Prep	Date: 5/14/2013	Analyst: JG
Lead		0.98	0.005		mg/L	5	5/15/2013
pH (25 °C)		SW9045	C		Prep	Date: 5/14/2013	Analyst: PBC
pН		7.6			pH Units	1	5/14/2013
Percent Moistu	re	D2974			Prep	Date: 5/11/2013	Analyst: RW
Percent Moisture	a	15.4	0.2		wt%	1	5/11/2013

21 5|28|13

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Project:	Pilsen Soil Site, Pilsen, 0	Chicago, IL	Collection Date 5/6/2013 4:45:00 PM				
Lab ID:	13050282-010B		Matrix: Soil				
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 **Print Date:** May 23, 2013

Client: Lab Order:	Weston Solutions 13050282		Client Sample ID: PA-RR04,06(0-6)-050613 Tag Number:							
		Chierre II					55.00 DM			
Project:	Pilsen Soil Site, Pilse	n, Chicago, IL		Con		te 5/6/2013 4::	55:00 PM			
Lab ID:	13050282-011A	1			Matri	x: Soil	1			
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed			
Mercury		SW74	71A		Prep	Date: 5/13/2013	Analyst: LB			
Mercury		0.61	0.02		mg/Kg-dry	1	5/13/2013			
Metals by ICP/I	MS	SW60	20 (SW30	50B)	Prep	Date: 5/13/2013	Analyst: JG			
Antimony		18 J	4.4		mg/Kg-dry	20	5/14/2013			
Cadmium		140	1.1		mg/Kg-dry	20	5/14/2013			
Chromium		56	2.2		mg/Kg-dry	20	5/14/2013			
Copper		11000	280		mg/Kg-dry	1000	5/14/2013			
Lead		11000	56		mg/Kg-dry	1000	5/14/2013			
Tin		980	11	*	mg/Kg-dry	20	5/14/2013			
Zinc		78000	560		mg/Kg-dry	1000	5/14/2013			
TCLP Metals by	y ICP/MS	SW13	11/6020 (\$	SW3005A)	Prep	Date: 5/14/2013	Analyst: JG			
Lead		12	0.005		mg/L	5	5/15/2013			
pH (25 °C)		SW904	45C		Prep	Date: 5/14/2013	Analyst: PBC			
pН		8.1			pH Units	1	5/14/2013			
Percent Moistu	ire	D2974			Prep	Date: 5/11/2013	Analyst: RW			
Percent Moisture	9	12.8	0.2	1.1.2	wt%	1	5/11/2013			

ZH 5/28/13

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions		Client Sample ID: PA-RR04,06(0-6)-050613						
Lab Order:	13050282		Tag Number: Fine Grained						
Project:	Pilsen Soil Site, Pilsen, 6	Chicago, IL		Collection Date 5/6/2013 4:55:00 PM					
Lab ID:	13050282-011B	Matrix: Soil							
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
In Vitro Extract	table Metals by ICP/MS	EDA O	200/0020	(C)4(2005A)	Deer	Data Elapiona			
III VILIO LALIAGI	dule metals by ICFING	PL- 1 - 1 - 34	ZUU/OUZU	(SW3005A)	Prep	Date: 5/19/2013	Analyst: JG		
Lead	able metals by ICF/MG	180	200/0020	(3993003A) *	mg/L	200 200	5/22/2013		
Lead		180	200/6020 1 200/6020	(3993003A) *	mg/L		5/22/2013		
Lead		180	1	(3W3003A) *	mg/L	200	5/22/2013		
Lead In Vitro Bioacc	essibility	180 EPA 92 77.2	1 200/6020	*	mg/L Prep %	200	5/22/2013 Analyst: JG 5/22/2013		

2	1.12	10.00			
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ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Client Sample ID: PA-RR04,06(6-24)-050613 Tag Number: Collection Date 5/6/2013 5:00:00 PM						
Lab ID:	13050282-012A		Matrix: Soil					
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed	
Mercury		SW747	'1A		Prep	Date: 5/13/2013	Analyst: LB	
Mercury		1.6	0.22		mg/Kg-dry	10	5/13/2013	
Metals by ICP/	MS	SW602	20 (SW30	50B)	Prep	Date: 5/13/2013	Analyst: JG	
Antimony		ND	4.1		mg/Kg-dry	20	5/14/2013	
Cadmium		16	1		mg/Kg-dry	20	5/14/2013	
Chromium		27	2		mg/Kg-dry	20	5/14/2013	
Copper		1800	250		mg/Kg-dry	1000	5/14/2013	
Lead		1700	10		mg/Kg-dry	100	5/13/2013	
Tin		240	10	*	mg/Kg-dry	20	5/14/2013	
Zinc		9900	510		mg/Kg-dry	1000	5/14/2013	
TCLP Metals b	y ICP/MS	SW131	1/6020 (SW3005A)	Prep	Date: 5/14/2013	Analyst: JG	
Lead		0.24	0.005		mg/L	5	5/15/2013	
pH (25 °C)		SW904	5C		Prep	Date: 5/14/2013	Analyst: PBG	
рH		8.3			pH Units	1	5/14/2013	
Percent Moistu	ire	D2974			Prep	Date: 5/11/2013	Analyst: RW	
Percent Moisture	B	13.5	0.2	1.1	wt%	1	5/11/2013	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

" - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

						er may 20	, 2010
Client:	Weston Solutions		Client Sample ID: PA-RR04,06(6-24)-050613				
Lab Order:	13050282			Та	g Numbe	r: Fine Gr	ained
Project:	Pilsen Soil Site, Pilsen, Chicago, IL		Collection Date 5/6/2013 5:00:00 PM				
Lab ID:	13050282-012B				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/I	MS	SW602 2600	0 (SW3) 10		Prep ng/Kg-dry	Date: 5/19	/2013 Analyst: JG 5/19/2013

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample réceived past holding time
- * Non-accredited parameter

- RL Reporting ' Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
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2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

					- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1			
Client:	Weston Solutions		Client Sample ID: PA-RR01,02(6-24)-0506131					
Lab Order:	13050282			T	ag Numbe	r:		
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Coll	ection Da	te 5/6/2013 4:	50:00 PM	
Lab ID:	13050282-013A				Matri	x: Soil		
Analyses	*	Result	RL	Qualifie	r Units	DF	Date Analyzed	
Mercury		SW74	71A		Prep	Date: 5/13/2013	Analyst: LB	
Mercury		0.59	0.02		mg/Kg-dry	1	5/13/2013	
Metals by ICP/I	MS	SW60	20 (SW30	50B)	Prep	Date: 5/13/2013	Analyst: JG	
Antimony		ND	23		mg/Kg-dry	100	5/13/2013	
Cadmium		8.6	1.2		mg/Kg-dry	20	5/14/2013	
Chromium		35	2.3		mg/Kg-dry	20	5/14/2013	
Copper		2500	290		mg/Kg-dry	1000	5/14/2013	
Lead		1500	58		mg/Kg-dry	1000	5/14/2013	
Tin		600	12		mg/Kg-dry	20	5/14/2013	
Zinc		14000	580		mg/Kg-dry	1000	5/14/2013	
TCLP Metals by	y ICP/MS	SW13	11/6020 (SW3005A)	Prep	Date: 5/14/2013	Analyst: JG	
Lead		5	0.005		mg/L	5	5/15/2013	
pH (25 °C)		SW904	45C		Prep	Date: 5/14/2013	Analyst: PBG	
pН		7.7			pH Units	1	5/14/2013	
Percent Moistu	re	D2974	1 m		Prep	Date: 5/11/2013	Analyst: RW	
Percent Moisture	8	15.7	0.2	*	wt%	1	5/11/2013	

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ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions				Client Sample ID: PA-RR01,02(6-24)-050613				
Lab Order:	13050282		Tag Number: Fine Grained				ned		
Project:	Pilsen Soil Site, Pilsen, Chicago, IL		Collection Date 5/6/2013 4:50:00 PM				4:50:00 PM		
Lab ID:	13050282-013B				Matri	k: Soil			
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

					Print Dat	e: May 23, 2	013		
Client:	Weston Solutions		Client Sample ID: PA-375-01(0-6)-050713D						
Lab Order:	13050282			Т	ng Numbe	r:			
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Coll	ection Da	te 5/7/2013 9	9:40:00 AM		
Lab ID:	13050282-014A		Matrix: Soil						
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed		
Mercury		SW7471	A		Prep	Date: 5/13/20	13 Analyst: LB		
Mercury		1	0.25		mg/Kg-dry	10	5/13/2013		
Metals by ICP/I	MS	SW6020	(SW30	50B)	Prep	Date: 5/13/20	13 Analyst: JG		
Antimony		ND	4.9	1.50	mg/Kg-dry	20	5/14/2013		
Cadmium		11	1.2		mg/Kg-dry	20	5/14/2013		
Chromium		40	2.5		mg/Kg-dry	20	5/14/2013		
Copper		680	31		mg/Kg-dry	100	5/14/2013		
Lead		1800	6.2		mg/Kg-dry	100	5/14/2013		
Tin		84	12	.*	mg/Kg-dry	20	5/14/2013		
Zinc		2900	62		mg/Kg-dry	100	5/14/2013		
TCLP Metals by	y ICP/MS	SW1311	/6020 (SW3005A)	Prep	Date: 5/14/20	13 Analyst: JG		
Lead		0.16	0.005		mg/L	5	5/15/2013		
pH (25 °C)		SW9045	C		Prep	Date: 5/14/20	13 Analyst: PBG		
pН		7.0			pH Units	1	5/14/2013		
Percent Moistu	ire	D2974			Prep	Date: 5/11/20	13 Analyst: RW		
Percent Moisture	э	26.4	0.2	*	wt%	1	5/11/2013		

Report Date: May 23, 2013

Qualifiers:

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- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

					2 - S			
Client:	Weston Solutions			Client Sample ID: PA-375-01(0-6)-050713D				
Lab Order:	13050282	Ti			g Numbe	er: Fine Grained	1	
Project:	Pilsen Soil Site, Pilsen, G	Chicago, IL Collection Date 5/7/2013			te 5/7/2013 9:4	10:00 AM		
Lab ID:	13050282-014B	Matrix: Soil						
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
In Vitro Extract	table Metals by ICP/MS	EPA 9	200/6020	(SW3005A)	Pre	Date: 5/19/2013	Analyst: JG	
Lead		22	0.1	*	mg/L	20	5/22/2013	
In Vitro Bioacc	essibility	EPA 9	200/6020		Pre	Date: 5/22/2013	Analyst: JG	
Lead		80.9	0.01		%	1	5/22/2013	
Metals by ICP/I	MS	SW602	20 (SW3)50B)	Prep	Date: 5/19/2013	Analyst: JG	
Lead		2700	10	n	ng/Kg-dry	100	5/19/2013	

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ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
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- R RPD outside accepted recovery limits
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2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions		Client Sample ID: PA-375-02(0-12)-050713						
Lab Order:	13050282		Tag Number:						
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL	Collection Date 5/7/2013 9:45:00 AM						
Lab ID:	13050282-015A		Matrix: Soil						
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed		
Mercury		SW747	71A		Prep	Date: 5/13/2	013 Analyst: LB		
Mercury		1.3	0.23		mg/Kg-dry	10	5/13/2013		
Metals by ICP/I	MS	SW602	20 (SW30	50B)	Prep	Date: 5/13/2	013 Analyst: JG		
Antimony		ND	25		mg/Kg-dry	100	5/13/2013		
Cadmium		14	1.2		mg/Kg-dry	20	5/14/2013		
Chromium		49	2.5		mg/Kg-dry	20	5/14/2013		
Copper		750	31		mg/Kg-dry	100	5/14/2013		
Lead		2500	6.2		mg/Kg-dry	100	5/14/2013		
Tin		130	12		mg/Kg-dry	20	5/14/2013		
Zinc		3300	62		mg/Kg-dry	100	5/14/2013		
TCLP Metals by	y ICP/MS	SW131	1/6020 (SW3005A)	Prep	Date: 5/14/2	013 Analyst: JG		
Lead		0.4	0.005		mg/L	5	5/15/2013		
pH (25 °C)		SW904	15C		Prep	Date: 5/14/2	013 Analyst: PBC		
рН		7.3			pH Units	1	5/14/2013		
Percent Moistu	re	D2974			Prep	Date: 5/11/2	013 Analyst: RW		
Percent Moisture	9	24.8	0.2		wt%	1	5/11/2013		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

111 - Sample received past nordin

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

		1-							
Client:	Weston Solutions				Client Sample ID: PA-375-02(0-12)-050713				
Lab Order:	13050282		Tag Number: Fine Grained						
Project:	roject: Pilsen Soil Site, Pilsen, Chicago, IL		Collection Date 5/7/2013 9:45:00 AM						
Lab ID:	13050282-015B				Matri	x: Soil			
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Metals by ICP/	MS	SW602	0 (SW3		Prep ng/Kg-dry	Date: 5/19	/2013 Analyst: JG 5/19/2013		

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

					Print Date: May 23, 2013				
Client:	it: Weston Solutions			Client Sample ID: PA-370-01(0-6)-050713					
Lab Order:	13050282			Tag Number:					
Project: Pilsen Soil Site, Pilsen, Chicago, IL			Collection Date 5/7/2013 10:45:00 AM						
Lab ID:	13050282-016A		Matrix: Soil						
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed		
Mercury		SW7471	A		Prep	Date: 5/13/201	3 Analyst: LB		
Mercury		0.43	0.021		mg/Kg-dry	1	5/13/2013		
Metals by ICP/I	MS	SW6020	(SW30	50B)	Prep	Date: 5/13/201:	3 Analyst: JG		
Antimony		ND	4.6		mg/Kg-dry	20	5/14/2013		
Cadmium		6.9	1.1		mg/Kg-dry	20	5/14/2013		
Chromium		44	2.3		mg/Kg-dry	20	5/14/2013		
Copper		150	29		mg/Kg-dry	100	5/14/2013		
Lead		700	5.7		mg/Kg-dry	100	5/14/2013		
Tin		28	11	*	mg/Kg-dry	20	5/14/2013		
Zinc		1600	57		mg/Kg-dry	100	5/14/2013		
TCLP Metals by ICP/MS		SW1311	SW1311/6020 (SW30			/3005A) Prep Date: 5/14/2013			
Lead		0.33	0.005		mg/L	5	5/15/2013		
pH (25 °C)		SW9045	SW9045C		Prep Date: 5/14/2013		Analyst: PBG		
На		7.7			pH Units	1	5/14/2013		
Percent Moisture		D2974			Prep	Date: 5/13/2013	Analyst: RW		
Percent Moisture	e	18.5	0.2	117	wt%	1	5/14/2013		

Report Date: May 23, 2013 Print Date: May 23, 2013

Qualifiers:

- J Analyte detected below quantitation limitsB Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

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Report Date: May 23, 2013 Print Date: May 23, 2013

Metals by ICP/MS Lead		SW6020 (SW3050B)			Prep Date: 5/19/2013 Analyst: JG mg/Kg-dry 100 5/19/2013				
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Lab ID:	13050282-016B		Matrix: Soil						
Project:	13050282 Pilsen Soil Site, Pilsen, Chicago, IL		Tag Number: Fine Grained Collection Date 5/7/2013 10:45:00 AM						
Lab Order:									
Client:	Weston Solutions			Client Sample ID: PA-370-01(0-6)-050713					

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time.
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Client Sample ID: PA-370-01(0-6)-050713D Tag Number: Collection Date 5/7/2013 10:50:00 AM							
Lab ID:	13050282-017A			Matrix: Soil					
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed		
Mercury		SW7471A			Prep	Analyst: LB			
Mercury		0.48	0.022		mg/Kg-dry	1	5/13/2013		
Metals by ICP/I	VIS	SW602	20 (SW30	50B)	Prep	Date: 5/13/2013	Analyst: JG		
Antimony		ND	4.8		mg/Kg-dry	20	5/14/2013		
Cadmium		5.5	1.2		mg/Kg-dry	20	5/14/2013		
Chromium		46	12		mg/Kg-dry	100	5/13/2013		
Copper		150	30		mg/Kg-dry	100	5/14/2013		
Lead		950	1.2		mg/Kg-dry	20	5/14/2013		
Tin		25	12		mg/Kg-dry	20	5/14/2013		
Zinc		1100	60		mg/Kg-dry	100	5/14/2013		
TCLP Metals by ICP/MS		SW1311/6020 (SW3005A)			Prep	Analyst: JG			
Lead		0.27	0.005		mg/L	5	5/15/2013		
pH (25 °C)		SW9045C			Prep Date: 5/14/2013		Analyst: PBG		
рH		7.8			pH Units	1	5/14/2013		
Percent Moisture		D2974			Prep	Date: 5/13/2013	Analyst: RW		
Percent Moisture	a. (18.5	0.2		wt%	1	5/14/2013		

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions						-01(0-6)-050713D
Lab Order: Project:	13050282 Pilsen Soil Site, Pilsen, Chie	п оле		~		: Fine Gr	ained 3 10:50:00 AM
Lab ID:	13050282-017B	cago, IL		Conce	Matri		5 10,50.00 ANI
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 **Print Date:** May 23, 2013

					1 A 14 14 15 15		
Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, IL		Тя	ıg Numbe	D: PA-370-02(r: te 5/7/2013 10	
Lab ID:	13050282-018A				Matri	x: Soil	
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 5/13/2013	Analyst: LB
Mercury		0.77	0.042		mg/Kg-dry	2	5/13/2013
Metals by ICP/I	MS	SW602	20 (SW30)50B)	. Prep	Date: 5/13/2013	Analyst: JG
Antimony		ND	5		mg/Kg-dry	20	5/14/2013
Cadmium		6.2	1.3		mg/Kg-dry	20	5/14/2013
Chromium		68	13		mg/Kg-dry	100	5/13/2013
Copper		220	31		mg/Kg-dry	100	5/14/2013
Lead		1700	1.3		mg/Kg-dry	20	5/14/2013
Tin		38	13	*	mg/Kg-dry	20	5/14/2013
Zinc		1600	63		mg/Kg-dry	100	5/14/2013
TCLP Metals by	y ICP/MS	SW131	1/6020 (SW3005A)	Prep	Date: 5/14/2013	Analyst: JG
Lead		0.4	0.005		mg/L	5	5/15/2013
pH (25 °C)		SW904	15C		Prep	Date: 5/14/2013	Analyst: PBG
pН		7.7			pH Units	1	5/14/2013
Percent Moistu	re	D2974			Prep	Date: 5/13/2013	Analyst: RW
Percent Moisture	9	22.1	0.2	*	wt%	1	5/14/2013

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

	Result	RL	Qualifier	Units	DF	Date Analyzed
13050282-018B				Matri	x: Soil	
Pilsen Soil Site, Pilsen	, Chicago, IL		Collec	ction Da	te 5/7/201	3 10:55:00 AM
13050282			Tag	, Numbe	r: Fine G	rained
Weston Solutions			Client S	ample I	D: PA-37(0-02(0-6)-050713
	13050282 Pilsen Soil Site, Pilser	13050282 Pilsen Soil Site, Pilsen, Chicago, IL 13050282-018B	13050282 Pilsen Soil Site, Pilsen, Chicago, IL 13050282-018B	13050282TagPilsen Soil Site, Pilsen, Chicago, ILCollect13050282-018B	13050282Tag NumbePilsen Soil Site, Pilsen, Chicago, ILCollection Da13050282-018BMatri	13050282Tag Number: Fine GrPilsen Soil Site, Pilsen, Chicago, ILCollection Date 5/7/20113050282-018BMatrix: Soil

 SW6020 (SW3050B)
 Prep Date: 5/19/2013
 Analyst: J

 Lead
 1000
 9.9
 mg/Kg-dry
 100
 5/19/2013

Qualifiers:

- J Analyte detected below quantitation limits
 B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

					Second section	10.000	
Client:	Weston Solutions					D: PA-370-02(6-12)-050713
Lab Order:	13050282			Ta	ig Numbe	r:	
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Coll	ection Da	te 5/7/2013 11	:00:00 AM
Lab ID:	13050282-019A	and the second			Matri	x: Soil	_
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 5/13/2013	Analyst: LB
Mercury		1.7	0.25		mg/Kg-dry	10	5/13/2013
Metals by ICP/I	MS	SW602	20 (SW30	50B)	Prep	Date: 5/13/2013	Analyst: JG
Antimony		ND	4.5		mg/Kg-dry	20	5/14/2013
Cadmium		8.7	1.1		mg/Kg-dry	20	5/14/2013
Chromium		41	11		mg/Kg-dry	100	5/13/2013
Copper		310	28		mg/Kg-dry	100	5/14/2013
Lead		1700	1.1		mg/Kg-dry	20	5/14/2013
Tin		49	11	*	mg/Kg-dry	20	5/14/2013
Zinc		2300	57		mg/Kg-dry	100	5/14/2013
TCLP Metals by	y ICP/MS	SW131	1/6020 (SW3005A)	Prep	Date: 5/14/2013	Analyst: JG
Lead		0.36	0.005		mg/L	5	5/15/2013
pH (25 °C)		SW904	5C		Prep	Date: 5/14/2013	Analyst: PBG
рН		7.7			pH Units	1	5/14/2013
Percent Moistu	ire	D2974			Prep	Date: 5/13/2013	Analyst: RW
Percent Moisture	9	24.6	0.2		wt%	1	5/14/2013

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions						2(6-12)-050713
Lab Order:	13050282			Tag	g Number	: Fine Grain	ed
Project:	Pilsen Soil Site, Pilsen, Ch	nicago, IL		Colle	ction Dat	e 5/7/2013 1	1:00:00 AM
Lab ID:	13050282-019B				Matrix	: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N	AS	SW6020	(SW30		Prep ng/Kg-dry	Date: 5/19/201	13 Analyst: 5/19/2013

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order:	Weston Solutions 13050282			Ta	ng Numbe	r:	1(0-6)-050713
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Colle	ection Da	te 5/7/2013 1	2:20:00 PM
Lab ID:	13050282-020A			-	Matri	x: Soil	1.5
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW7471	A		Prep	Date: 5/13/20	13 Analyst: LB
Mercury		0.73	0.026		mg/Kg-dry	1	5/13/2013
Metals by ICP/I	MS	SW6020	(SW30	50B)	Prep	Date: 5/13/20	13 Analyst: JG
Antimony		ND	5.3		mg/Kg-dry	20	5/14/2013
Cadmium		7.5	1.3		mg/Kg-dry	20	5/14/2013
Chromium		43	13		mg/Kg-dry	100	5/13/2013
Copper		440	33		mg/Kg-dry	100	5/14/2013
Lead		1500	1.3		mg/Kg-dry	20	5/14/2013
Tin		52	13	*	mg/Kg-dry	20	5/14/2013
Zinc		1700	66		mg/Kg-dry	100	5/14/2013
TCLP Metals by	VICP/MS	SW1311	/6020 (SW3005A)	Prep	Date: 5/14/20	13 Analyst: JG
Lead		0.26	0.005		mg/L	5	5/15/2013
pH (25 °C)		SW9045	С		Prep	Date: 5/14/201	13 Analyst: PBC
рH		6.7			pH Units	1	5/14/2013
Percent Moistu	re	D2974			Prep	Date: 5/13/201	13 Analyst: RW
Percent Moisture	9	27.3	0.2	*	wt%	1	5/14/2013

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded.

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

				-			, ====
Client:	Weston Solutions			Client S	Sample I	D: PA-369	9-01(0-6)-050713
Lab Order:	13050282			Tag	y Numbe	r: Fine Gr	ained
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Colle	ction Da	te 5/7/201	13 12:20:00 PM
Lab ID:	13050282-020B	Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/	MS	SW602 2500	0 (SW3) 9.9		Prep ng/Kg-dry	Date: 5/19 100	/2013 Analyst: JG 5/19/2013

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, IL		Ta	ig Numbe ection Da	te 5/7/2013 12	
Lab ID:	13050282-021A				Matri	x: Soil	
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW747	1A		Prep	Date: 5/13/2013	Analyst: LB
Mercury		0.23	0.024		mg/Kg-dry	4	5/13/2013
Metals by ICP/I	MS	SW602	0 (SW30	50B)	Prep	Date: 5/14/2013	Analyst: JG
Antimony		ND	4.8		mg/Kg-dry	20	5/14/2013
Cadmium		ND	1.2		mg/Kg-dry	20	5/14/2013
Chromium		ND	24		mg/Kg-dry	200	5/14/2013
Copper		100	60		mg/Kg-dry	200	5/14/2013
Lead		480	1.2		mg/Kg-dry	20	5/14/2013
Tin		ND	12	*	mg/Kg-dry	20	5/14/2013
Zinc		560	120		mg/Kg-dry	200	5/14/2013
TCLP Metals by	y ICP/MS	SW131	1/6020 (SW3005A)	Prep	Date: 5/14/2013	Analyst: JG
Lead		0.05	0.005		mg/L	5	5/15/2013
pH (25 °C)		SW904	5C		Prep	Date: 5/14/2013	Analyst: PBC
pН		6.3			pH Units	1	5/14/2013
Percent Moistu	ire	D2974			Prep	Date: 5/13/2013	Analyst: RW
Percent Moisture	e	25.8	0.2	*	wt%	1	5/14/2013

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, 1L 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions			Client S	Sample II): PA-369-01	(0-2)-050713
Lab Order:	13050282			Tag	g Number	: Fine Graine	ed
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Dat	e 5/7/2013 1	2:15:00 PM
Lab ID:	13050282-021B	Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Client Sample ID: PA-369-02(0-12)-050713 Tag Number: Chicago, IL Collection Date 5/7/2013 12:25:00 PM							
Lab ID:	13050282-022A				Matri	x: Soil			
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed		
Mercury		SW747	1A		Prep	Date: 5/13/20	13 Analyst: LB		
Mercury		t	0.052		mg/Kg-dry	2	5/13/2013		
Metals by ICP/I	MS	SW602	0 (SW30	50B)	Prep	Date: 5/14/20	13 Analyst: JG		
Antimony		ND	4.7		mg/Kg-dry	20	5/14/2013		
Cadmium		6.9	1.2		mg/Kg-dry	20	5/14/2013		
Chromium		40	24		mg/Kg-dry	200	5/14/2013		
Copper	÷	560	59		mg/Kg-dry	200	5/14/2013		
Lead		1700	1.2		mg/Kg-dry	20	5/14/2013		
Tin		87	12	*	mg/Kg-dry	20	5/14/2013		
Zinc		3000	120		mg/Kg-dry	200	5/14/2013		
TCLP Metals by	VICP/MS	SW131	1/6020 (SW3005A)	Prep	Date: 5/14/20	13 Analyst: JG		
Lead		0.41	0.005		mg/L	5	5/15/2013		
pH (25 °C)		SW904	5C		Prep	Date: 5/14/20	13 Analyst: PBC		
рН		7.2			pH Units	1	5/14/2013		
Percent Moistu	re	D2974			Prep	Date: 5/13/20	13 Analyst: RW		
Percent Moisture		27.4	0.2	1.14	wt%	1	5/14/2013		

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, 1L 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP 1L300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

						•• ••••• •••	010
Client:	Weston Solutions			Client S	Sample IJ	D: PA-369-02	2(0-12)-050713
Lab Order:	13050282			Ta	g Number	r: Fine Grain	ed
Project:	Pilsen Soil Site, Pilsen, Ch	icago, IL		Colle	ction Da	te 5/7/2013 1	2:25:00 PM
Lab ID:	13050282-022B	Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/I Lead	MS	SW6020 2100	(SW30 9.9		Prep ng/Kg-dry	Date: 5/19/20 100	13 Analyst: JG 5/19/2013

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Nou according to according to the second s
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions						04(0-6)-050713
Lab Order:	13050282				ag Numbe		
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Coll		te 5/7/2013 12	:30:00 PM
Lab ID:	13050282-023A		-		Matri	x: Soil	
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW7471	A		Prep	Date: 5/13/2013	Analyst: LB
Mercury		1.1	0.043		mg/Kg-dry	2	5/13/2013
Metals by ICP/!	WS	SW6020	(SW30	50B)	Prep	Date: 5/14/2013	Analyst: JG
Antimony		ND	4.6		mg/Kg-dry	20	5/14/2013
Cadmium		5.8	1.1		mg/Kg-dry	20	5/14/2013
Chromium		24	23		mg/Kg-dry	200	5/14/2013
Copper		410	57		mg/Kg-dry	200	5/14/2013
Lead		2300	1.1		mg/Kg-dry	20	5/14/2013
Tìn		49	11	*	mg/Kg-dry	20	5/14/2013
Zinc		2700	110		mg/Kg-dry	200	5/14/2013
TCLP Metals by	y ICP/MS	SW1311	6020 (SW3005A)	Prep	Date: 5/14/2013	Analyst: JG
Lead		1.2	0.005		mg/L	5	5/15/2013
pH (25 °C)		SW9045	С		Prep	Date: 5/14/2013	Analyst: PBG
рН		7.5			pH Units	1	5/14/2013
Percent Moistu	re	D2974			Prep	Date: 5/13/2013	Analyst: RW
Percent Moisture	3	13.5	0.2		wt%	1	5/14/2013

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client:	Weston Solutions		Client Sample ID: PA-369-03,04(0-6)-050713					
Lab Order:	13050282		Tag Number: Fine Grained					
Project: Pilsen Soil Site, Pilsen, Chicago, IL			Collection Date 5/7/2013 12:30:00 PM					
Lab ID:	13050282-023B		Matrix: Soil					
Analyses	R	eşult l	RL Qualifier	Units	DF	Date Analyzed		

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

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Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago II	Client Sample ID: PA-371-01(0-6)-050713 Tag Number: Collection Date 5/7/2013 2:15:00 PM Matrix: Soil					
Lab ID:	13050282-024A	Cilicago, IL						
Analyses	13000202 02 111	Result					Date Analyzed	
Mercury		SW747	'1A		Prep	Date: 5/13/2013	Analyst: LB	
Mercury		2	0.25		mg/Kg-dry	10	5/13/2013	
Metals by ICP/I	IS	SW602	20 (SW30	50B)	Prep	Date: 5/14/2013	Analyst: JG	
Antimony		ND	5.1		mg/Kg-dry	20	5/14/2013	
Cadmium		7.7	1.3		mg/Kg-dry	20	5/14/2013	
Chromium		40	26		mg/Kg-dry	200	5/14/2013	
Copper		450	64		mg/Kg-dry	200	5/14/2013	
Lead		1800	1.3		mg/Kg-dry	20	5/14/2013	
Tin		49	13	*	mg/Kg-dry	20	5/14/2013	
Zinc		2800	130		mg/Kg-dry	200	5/14/2013	
TCLP Metals by	ICP/MS	SW131	1/6020 (\$	SW3005A)	Prep	Date: 5/14/2013	Analyst: JG	
Lead		0.24	0.005	9	mg/L	5	5/15/2013	
pH (25 °C)		SW904	5C		Prep	Date: 5/14/2013	Analyst: PBG	
pН		6.4			pH Units	1	5/14/2013	
Percent Moistu	re	D2974			Prep	Date: 5/13/2013	Analyst: RW	
Percent Moisture		27.1	0.2		wt%	1	5/14/2013	

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time * - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client Sample ID: PA-371-01(0-6)-050713 Tag Number: Fine Grained Collection Date 5/7/2013 2:15:00 PM
Collection Date 5/7/2013 2:15:00 PM
AF
Matrix: Soil
RL Qualifier Units DF Date Analy

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order:	Weston Solutions 13050282				Sample I ag Numbe		(0-6)-050713	
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Coll	ection Da	te 5/7/2013 2	:20:00 PM	
Lab ID:	13050282-025A	2.0	Matrix: Soil					
Analyses	-	Result	RL	Qualifie	r Units	DF	Date Analyzed	
Mercury		SW747	1A		Prep	Date: 5/13/201	3 Analyst: LB	
Mercury		0.31	0.024		mg/Kg-dry	1	5/13/2013	
Metals by ICP/I	NS	SW602	0 (SW30	50B)	Prep	Date: 5/14/201	3 Analyst: JG	
Antimony		ND	5.3		mg/Kg-dry	20	5/14/2013	
Cadmium		ND	1.3		mg/Kg-dry	20	5/14/2013	
Chromium		14	2.7		mg/Kg-dry	20	5/14/2013	
Copper		54	6.6		mg/Kg-dry	20	5/14/2013	
Lead		320	13		mg/Kg-dry	200	5/14/2013	
Tin		ND	13	*	mg/Kg-dry	20	5/14/2013	
Zinc		360	13		mg/Kg-dry	20	5/14/2013	
TCLP Metals by	ICP/MS	SW131	1/6020 (\$	SW3005A)	Prep	Date: 5/15/201	3 Analyst: JG	
Lead		0.024	0.005		mg/L	5	5/15/2013	
pH (25 °C)		SW904	5C		Prep	Date: 5/14/201	3 Analyst: PBG	
рН		7.3			pH Units	1	5/14/2013	
Percent Moistu	re	D2974			Prep	Date: 5/13/201	3 Analyst: RW	
Percent Moisture	3	28.5	0.2		wt%		5/14/2013	

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, 1L 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LubCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

							27126	
Client:	Client: Weston Solutions			Client Sample ID: PA-371-02(0-6)-050713				
Lab Order:	13050282		Tag Number: Fine Grained					
Project:	Pilsen Soil Site, Pilsen, Chicago, IL			Collection Date 5/7/2013 2:20:00 PM				
Lab ID:	13050282-025B	Matrix: Soil						
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Metals by ICP/	MS	SW602 450	0 (SW30 10		Prep mg/Kg-dry	Date: 5/19.	/2013 Analyst: JG 5/19/2013	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

					2010-000 March		1.	
Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, IL		02(0-6)-050713D 3 2:25:00 PM				
Lab ID:	13050282-026A		Matrix: Soil					
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed	
Mercury		SW7471	A		Prep	Date: 5/13/2	2013 Analyst: LB	
Mercury		0.18	0.025		mg/Kg-dry	1	5/13/2013	
Metals by ICP/I	MS	SW6020) (SW3(050B)	Prep	Date: 5/14/2	2013 Analyst: JG	
Antimony		ND	5.3		mg/Kg-dry	20	5/14/2013	
Cadmium		ND	1.3		mg/Kg-dry	20	5/14/2013	
Chromium		14	2.6		mg/Kg-dry	20	5/14/2013	
Copper		51	6.6		mg/Kg-dry	20	5/14/2013	
Lead		410	13		mg/Kg-dry	200	5/14/2013	
Tin		ND	13	*	mg/Kg-dry	20	5/14/2013	
Zinc		330	13		mg/Kg-dry	20	5/14/2013	
TCLP Metals by	VICP/MS	SW1311	/6020 (SW3005A)	Prep	Date: 5/15/2	2013 Analyst: JG	
Lead		0.033	0.005	1	mg/L	5	5/15/2013	
pH (25 °C)		SW9045	C		Prep	Date: 5/14/2	2013 Analyst: PBG	
pН		. 7.4			pH Units	1	5/14/2013	
Percent Moistu	re	D2974			Prep	Date: 5/13/2	013 Analyst: RW	
Percent Moisture	9	27.8	0.2	*	wt%	1	5/14/2013	

	a	
	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Metals by ICP/					· · ·				
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Lab ID:	13050282-026E				Matri	x: Soil			
Project:	Pilsen Soil Site,	Pilsen, Chicago, IL	Collection Date 5/7/2013 2:25:00 PM						
Lab Order:	13050282		Tag Number: Fine Grained				ained		
Client:	Weston Solutions			Client Sample ID: PA-371-02(0-6)-050713D					

 Metals by ICP/MS
 SW6020 (SW3050B)
 Prep Date: 5/19/2013
 Analyst: JG

 Lead
 460
 10
 mg/Kg-dry
 100
 5/19/2013

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

					Print Dat	te: May 23, 2	2013
Client: Lab Order: Project: Lab ID:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen, 13050282-027A	Chicago, IL		T	ag Numbe ection Da		01(0-6)-050713 3:20:00 PM
Analyses	19090202 0277	Result					Date Analyzed
Mercury Mercury		SW7471 / 0.46	A 0.021		Prep mg/Kg-dry	Date: 5/13/2	013 Analyst: LB 5/13/2013
Metals by ICP/M Antimony Cadmium Chromium Copper Lead Tin Zinc	AS	SW6020 ND 5.4 29 250 890 28 1800	(SW30 5 1.3 2.5 6.3 13 13 13	950B) *	Prep mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry	Date: 5/14/20 20 20 20 20 200 200 20 20	013 Analyst: JG 5/14/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013
TCLP Metals by Lead pH (25 °C)	ICP/MS	6337	6020 (\$ 0.005	SW3005A)	Prep mg/L	Date: 5/15/20 5 Date: 5/14/20	013 Analyst: JG 5/15/2013
pH Percent Moistu Percent Moisture	17 C	7.0 D2974 25.3	0.2		pH Units	1 Date: 5/13/20	5/14/2013

Report Date: May 23, 2013 Print Date: May 23, 2013

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

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Report Date: May 23, 2013 Print Date: May 23, 2013

Metals by ICP/MS		CIMCOO	6020 (SW3050B) Prep Date: 5/19/2013 Analyst: J				/2013 Analyst: JG
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Lab ID:	13050282-027B		Matrix: Soil				
Project: Pilsen Soil Site, Pilsen Chicago, IL			Collection Date 5/7/2013 3:20:00 PM				
Lab Order:	13050282		Tag Number: Fine Grained				rained
Client:	Weston Solutions		Client Sample ID: PA-349-01(0-6)-050713				

Lead 1400

9.6 mg/Kg-dry 100 5/19/2013

3	- 13	182	22		
211	31	m	et	18.5	

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recorrery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 **Print Date:** May 23, 2013

Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, IL	Client Sample ID: PA-349-02(0-12)-050713 Tag Number: Collection Date 5/7/2013 3:25:00 PM						
Lab ID:	13050282-028A		Matrix: Soil						
Analyses		Result RL			r Units	DF	Date Analyzed		
Mercury		SW7471	A		Prep	Date: 5/13/20	13 Analyst: LB		
Mercury		0.25	0.025		mg/Kg-dry	1	5/13/2013		
Metals by ICP/I	MS	SW6020	(SW30	50B)	Prep	Date: 5/14/20	13 Analyst: JG		
Antimony		ND	5.2		mg/Kg-dry	20	5/14/2013		
Cadmium		2	1.3		mg/Kg-dry	20	5/14/2013		
Chromium		21	2.6		mg/Kg-dry	20	5/14/2013		
Copper		100	6.5		mg/Kg-dry	20	5/14/2013		
Lead		630	1.3		mg/Kg-dry	20	5/14/2013		
Tin		17	13	*	mg/Kg-dry	20	5/14/2013		
Zinc		650	13		mg/Kg-dry	20	5/14/2013		
TCLP Metals by	y ICP/MS	SW1311	/6020 (SW3005A)	Prep	Date: 5/15/201	13 Analyst: JG		
Lead		0.18	0.005		mg/L	5	5/15/2013		
pH (25 °C)		SW9045	с		Prep	Date: 5/14/201	3 Analyst: PBC		
pН		8.0			pH Units	1	5/14/2013		
Percent Moistu	re	D2974			Prep	Date: 5/13/201	3 Analyst: RW		
Percent Moisture	e	23.7	0.2	*	wt%	1	5/14/2013		

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

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Report Date: May 23, 2013 Print Date: May 23, 2013

				1.1				
Client:	Weston Solutions		Client Sample ID: PA-349-02(0-12)-05071					
Lab Order:	13050282		Tag Number: Fine Grained					
Project:	Pilsen Soil Site, Pilsen, C	lsen Soil Site, Pilsen, Chicago, IL C			Collection Date 5/7/2013 3:25:00 PM			
Lab ID:	13050282-028B	Matrix: Soil						
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Metals by ICP/I	MS	SW602 610	0 (SW30 4.9		Prep mg/Kg-dry	Date: 5/19/201	13 Analyst: JG 5/19/2013	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

- S Analyte netected in the associated Method Bla
- HT Sample received past holding time
- Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

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					Print Dat	te: May 23, 20	13				
Client: Lab Order: Project:	ab Order:13050282roject:Pilsen Soil Site, Pilsen, Chicago, IL				Client Sample ID: PA-349-03(0-6)-050713 Tag Number: Collection Date 5/7/2013 4:30:00 PM						
Lab ID: Analyses	13050282-029A	Result	RL	Qualifie		x: Soil DF	Date Analyzed				
Mercury Mercury	- N. H.	SW7471/ 0.49	A 0.022		Prep mg/Kg-dry	Date: 5/13/201	3 Analyst: LB 5/13/2013				
Metals by ICP/M Antimony Cadmium Chromium Copper Lead Tin Zinc	AS 1	SW6020 ND 2.5 27 99 1400 19 930	(SW30 4.2 1.1 2.1 5.3 11 11 11		Prep mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry mg/Kg-dry	Date: 5/14/201 20 20 20 20 20 200 20 20 20 20	3 Analyst: JG 5/14/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013 5/14/2013				
TCLP Metals by Lead	ICP/MS	SW1311 / 0.55	6020 (3	5W3005A)	Prep mg/L	Date: 5/15/201 5	3 Analyst: JG 5/15/2013				
pH (25 °C) pH		SW90450	C		Prep pH Units	Date: 5/14/201	3 Analyst: PBG 5/14/2013				
Percent Moisture Percent Moisture	5.7.	D2974 12.6	0.2		Prep wt%	Date: 5/13/201	3 Analyst: RW 5/14/2013				

Report Date: May 23, 2013 Print Date: May 23, 2013

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ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed		
Lab ID:	13050282-029B		Matrix: Soil						
Project:	Pilsen Soil Site, Pilser		Collec	ction Da	te 5/7/201	13 4:30:00 PM			
Lab Order:	13050282		Tag Number: Fine Grained						
Client:	Weston Solutions		Client Sample ID: PA-349-03(0-6)-050713						

 Metals by ICP/MS
 SW6020 (SW3050B)
 Prep Date: 5/19/2013
 Analyst: JG

 Lead
 1500
 4.9
 mg/Kg-dry
 50
 5/19/2013

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

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Client: Lab Order:	Weston Solutions 13050282		Client Sample ID: PA-351-01(0-6)-050713 Tag Number:							
		Older II	Collection Date 5/7/2013 3:45:00 PM							
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL		Con			:45:00 PM			
Lab ID:	13050282-030A				Matri	x: Soil				
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed			
Mercury		· SW7471	A		Prep	Date: 5/13/201	3 Analyst: LB			
Mercury		0.28	0.023		mg/Kg-dry	1	5/13/2013			
Metals by ICP/I	MS	SW6020) (SW30)50B)	Prep	Date: 5/14/201	3 Analyst: JG			
Antimony		NDUT	4.3		mg/Kg-dry	20	5/14/2013			
Cadmium		ND	1.1		mg/Kg-dry	20	5/14/2013			
Chromium		14	2.2		mg/Kg-dry	20	5/15/2013			
Copper		58 J	54		mg/Kg-dry	200	5/14/2013			
Lead		390	1.1		mg/Kg-dry	20	5/14/2013			
Tin		ND	11	*	mg/Kg-dry	20	5/14/2013			
Zinc		490	110		mg/Kg-dry	200	5/14/2013			
TCLP Metals by	ICP/MS	SW1311	/6020 (SW3005A)	Prep	Date: 5/15/201	3 Analyst: JG			
Lead		0.75	0.005		mg/L	5	5/15/2013			
pH (25 °C)		SW9045	C		Prep	Date: 5/14/201:	3 Analyst: PBG			
рH		7.8			pH Units	1	5/14/2013			
Percent Moistu	re	D2974			Prep	Date: 5/13/201:	3 Analyst: RW			
Percent Moisture	3	13.5	0.2		wt%	1	5/14/2013			

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Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

			-	A MARE 12 GEL	er muy 25	, 2015	
Weston Solutions		Client Sample ID: PA-351-01(0-6)-050713					
13050282		Tag Number: Fine Grained					
Pilsen Soil Site, Pilsen, G	IL Collection Date 5/7/2013 3:45:00 PM						
13050282-030B				Matri	x: Soil		
	Result	RL	Qualifier	Units	DF	Date Analyzed	
MS	SW602	0 (SW30 9.9			Date: 5/19	/2013 Analyst: JG 5/19/2013	
	13050282 Pilsen Soil Site, Pilsen, (13050282-030B	13050282 Pilsen Soil Site, Pilsen, Chicago, IL 13050282-030B Result MS SW602	13050282 Pilsen Soil Site, Pilsen, Chicago, IL 13050282-030B Result RL MS SW6020 (SW30	Weston SolutionsClient S13050282TapPilsen Soil Site, Pilsen, Chicago, ILColle13050282-030BResultRLQualifierMSSW6020 (SW3050B)	Weston SolutionsClient Sample II13050282Tag NumberPilsen Soil Site, Pilsen, Chicago, ILCollection Date13050282-030BMatrixResultRLQualifierUnitsSW6020 (SW3050B)Prep	13050282Tag Number: Fine GrPilsen Soil Site, Pilsen, Chicago, ILCollection Date 5/7/20113050282-030BMatrix: SoilResultRLQualifierUnitsDFMSSW6020 (SW3050B)Prep Date: 5/19	

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

					2 T 12 2 C 12	CALINE 201			
Client: Lab Order:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chiengo II	Client Sample ID: PA-141-01(0-6)-050713 Tag Number: Collection Date 5/7/2013 5:40:00 PM						
Project: Lab ID:	13050282-031A	Chicago, IL		Con		x: Soil	5:40:00 PM		
	13030262-031A				100 H 30 1	X; 5011			
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed		
Mercury		SW74	71A		Prep	Date: 5/13/2	2013 Analyst: LB		
Mercury		0.64	0.024		mg/Kg-dry	1	5/13/2013		
Metals by ICP/I	WS	SW60	20 (SW30	50B)	Prep	Date: 5/14/2	2013 Analyst: JG		
Antimony		ND	4.7		mg/Kg-dry	20	5/14/2013		
Cadmium		3.3	1.2		mg/Kg-dry	20	5/14/2013		
Chromium		33	2.4		mg/Kg-dry	20	5/14/2013		
Copper		200	5.9		mg/Kg-dry	20	5/14/2013		
Lead		860	12		mg/Kg-dry	200	5/14/2013		
Tin		39	12	*	mg/Kg-dry	20	5/14/2013		
Zinc		700	12		mg/Kg-dry	20	5/14/2013		
TCLP Metals by	ICP/MS	SW13	11/6020 (SW3005A)	Prep	Date: 5/15/2	013 Analyst: JG		
Lead		0.22	0.005		mg/L	5	5/15/2013		
pH (25 °C)		SW904	45C		Prep	Date: 5/14/2	013 Analyst: PBG		
pН		8.1			pH Units	1	5/14/2013		
Percent Moistu	re	D2974			Prep	Date: 5/13/2	013 Analyst: RW		
Percent Moisture		17.1	0.2		wt%	1	5/14/2013		

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, 1L 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order:	Weston Solutions 13050282		Client Sample ID: PA-141-01(0-6)-050713 Tag Number: Fine Grained					
Lab Order: Project:	Pilsen Soil Site, Pilsen, Ch	icago, IL						
Lab ID:	13050282-031B		Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

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- Analyte detected in the associated method Blat
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

Client: Lab Order: Project:	Weston Solutions 13050282 Pilsen Soil Site, Pilsen,	Chicago, IL		Ta	ig Numbe ection Da	te 5/7/2013 5:	
Lab ID:	13050282-032A	Law Con	-			x: Soil	ans istendo
Analyses	-	Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 5/13/201:	3 Analyst: LB
Mercury		0.95	0.038		mg/Kg-dry	2	5/13/2013
Metals by ICP/	MS	SW60	20 (SW30)50B)	Prep	Date: 5/14/201:	Analyst: JG
Antimony		ND	4.6		mg/Kg-dry	20	5/14/2013
Cadmium		3.5	1.1		mg/Kg-dry	20	5/14/2013
Chromium		40	2.3		mg/Kg-dry	20	5/14/2013
Copper		190	5.7		mg/Kg-dry	20	5/14/2013
Lead		1600	11		mg/Kg-dry	200	5/14/2013
Tin		26	11		mg/Kg-dry	20	5/14/2013
Zinc		970	11		mg/Kg-dry	20	5/14/2013
TCLP Metals by	y ICP/MS	SW13	11/6020 (SW3005A)	Prep	Date: 5/15/2013	Analyst: JG
Lead		0.25	0.005		mg/L	5	5/15/2013
pH (25 °C)		SW904	45C		Prep	Date: 5/14/2013	Analyst: PBG
рH		7.7			pH Units	1	5/14/2013
Percent Moistu	ire	D2974	2		Prep	Date: 5/13/2013	Analyst: RW
Percent Moisture	e	16.6	0.2	1.12	wt%	t	5/14/2013

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, 1L 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Report Date: May 23, 2013 Print Date: May 23, 2013

				-			, =			
Client:	Weston Solutions		Client Sample ID: PA-141-02(0-6)-050713							
Lab Order:	13050282		Tag Number: Fine Grained							
Project:	Pilsen Soil Site, Pilsen, G	Pilsen Soil Site, Pilsen, Chicago, IL			Collection Date 5/7/2013 5:45:00 PM					
Lab ID:	13050282-032B	Matrix: Soil								
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed			
Metals by ICP/I Lead	MS	SW602 1200	0 (SW30 4.8		Prep ng/Kg-dry	Date: 5/19 50	/2013 Analyst: JG 5/19/2013			

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

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Report Date: May 23, 2013 Print Date: May 23, 2013

_		*									
Client:Weston SolutionsLab Order:13050282Project:Pilsen Soil Site, Pilsen, Chicago, IL				Client Sample ID: PA-141-03(0-6)-050713 Tag Number: Collection Date 5/7/2013 5:50:00 PM							
Lab ID:	13050282-033A				Matri	x: Soil					
Analyses		Result	RL	Qualifie	er Units	DF	Date Analyzed				
Mercury		SW7471	A		Prep	Date: 5/13/201	3 Analyst: LB				
Mercury		0.56	0.021		mg/Kg-dry	1	5/13/2013				
Metals by ICP/I	MS	SW6020) (SW30	50B)	Prep	Date: 5/14/201	3 Analyst: JG				
Antimony		ND	4.6		mg/Kg-dry	20	5/14/2013				
Cadmium		5.9	1.1		mg/Kg-dry	20	5/14/2013				
Chromium		110	2.3		mg/Kg-dry	20	5/14/2013				
Copper		220	5.7		mg/Kg-dry	20	5/14/2013				
Lead		3300	11		mg/Kg-dry	200	5/14/2013				
Tin		43	11		mg/Kg-dry	20	5/14/2013				
Zinc		1500	11		mg/Kg-dry	20	5/14/2013				
TCLP Metals by	ICP/MS	SW1311	/6020 (SW3005A)	Prep	Date: 5/15/201	3 Analyst: JG				
Lead		0.56	0.005		mg/L	5	5/15/2013				
pH (25 °C)		SW9045	C		Prep	Date: 5/14/201	3 Analyst: PBG				
pН		8.0			pH Units	1	5/14/2013				
Percent Moistu	re	D2974			Prep	Date: 5/13/201:	Analyst: RW				
Percent Moisture	£1.	19.6	0.2		wt%	1	5/14/2013				

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
 - E Value above quantitation range
 - H Holding time exceeded

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Report Date: May 23, 2013 Print Date: May 23, 2013

					paces at cos	2012/2014/121	1-1001	
Client:	Weston Solutions		Client Sample ID: PA-141-03(0-6)-050713					
Lab Order:	13050282		Tag Number: Fine Grained					
Project:	Pilsen Soil Site, Pilsen,	Chicago, IL	Collection Date 5/7/2013 5:50:00 PM					
Lab ID:	13050282-033B		Matrix: Soil					
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Metals by ICP/	MS	SW602	0 (SW3		Prep mg/Kg-dry	Date: 5/19	/2013 Analyst: JG 5/19/2013	

Qualifiers:

- J Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time
- * Non appredited apprenter
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

PILSEN AREA SOIL SITE CHICAGO, ILLINOIS DATA VALIDATION REPORT

Date: July 31, 2013
Laboratory: STAT Analysis Corporation (STAT), Chicago, Illinois
Laboratory Project #: 13070526
Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON[®]) Superfund
Technical Assessment and Response Team (START)
Analytical TDD and Work Order #: S05-0001-1211-003/20405.016.001.2038.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 5 solid samples collected for the Pilsen Area Soil Site. The samples are source samples from a baghouse and have been held under custody by NEIC/USGS/EPA since collection in Colorado. The chain-of-custody for the samples state that the samples are less than 75 microns in particle size. The samples were analyzed for the following parameters and U.S. Environmental Protection Agency methods:

- Total Metals by SW-846 Methods 6020 and 7471A
- Moisture Content by ASTM D2974

A level II data package was requested from STAT. The data validation was conducted in general accordance with the EPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review" dated January 2010. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

TOTAL METALS BY EPA SW-846 METHODS 6020 AND 7471A

1. <u>Samples</u>

The following table summarizes the samples for which this data validation is being conducted.

			Date	
Samples	Lab ID	Matrix	Collected	Date Analyzed
BH-1 N105006-05 Split B	13070526-001	Solid	Unknown	7/17/2013
BH-2 N105006-06 Split B	13070526-002	Solid	Unknown	7/17/2013
BH-4 N105006-08 Split B	13070526-003	Solid	Unknown	7/17/2013
BH-4 N105006-09 Split B	13070526-004	Solid	Unknown	7/17/2013
BH-5 N105006-07 Split B	13070526-005	Solid	Unknown	7/17/2013

2. Holding Times

The collection dates of the samples are unknown. However, the holding times for metals are 28 days for mercury and 180 days from sample collection to analysis for all other metals. Due to the long holding times for these analyses, it is assumed that they were likely not exceeded and no qualifications are necessary.

3. Blank Results

Method blanks were analyzed with the metals analyses. The blanks contained no metals contamination above the reporting limits. There were detections of lead, tin, and mercury below the reporting limits in the blanks. However, the sample results were much greater or contained no detections of these metals. No qualifications were required.

4. <u>Laboratory Control Sample (LCS) Results</u>

The LCS recoveries were within the quality control (QC) limits.

5. <u>Matrix Spike (MS) and MS Duplicate (MSD) Results</u>

STAT did not analyze a site-specific MS/MSD. Therefore matrix interferences could not be evaluated. No qualifications were applied.

6. **Overall Assessment**

The metals data are acceptable for use as qualified based on the information received.

GENERAL CHEMISTRY PARAMETERS (Moisture Content by ASTM D2974)

1. <u>Samples</u>

The following table summarizes the samples for which this data validation is being conducted.

			Date	
Samples	Lab ID	Matrix	Collected	Date Analyzed
BH-1 N105006-05 Split B	13070526-001	Solid	Unknown	7/15/2013
BH-2 N105006-06 Split B	13070526-002	Solid	Unknown	7/15/2013
BH-4 N105006-08 Split B	13070526-003	Solid	Unknown	7/15/2013
BH-4 N105006-09 Split B	13070526-004	Solid	Unknown	7/15/2013
BH-5 N105006-07 Split B	13070526-005	Solid	Unknown	7/15/2013

2. Holding Times

The holding time for moisture is 28 days. The collection dates of the samples are unknown. Due to the long holding time for this analysis, it is assumed that they were likely not exceeded and no qualifications are necessary.

3. <u>Blank Results</u>

The method blank was non-detect for moisture which is acceptable.

4. <u>LCS Results</u>

The LCS recoveries were within the QC limits.

5. <u>Laboratory Duplicates</u>

The RPD was within QC limits for the laboratory duplicate.

6. **Overall Assessment**

The moisture data are acceptable for use based on the information received.

ATTACHMENT

STAT ANALYSIS CORPORATION RESULTS SUMMARY WITH QUALIFIERS



2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001;AIHA 101160; NVLAP LabCode 101202

July 24, 2013

Weston Solutions 750 E. Bunker Court Suite 500 Vernon Hills, IL 60061 Telephone: (847) 918-4094 (847) 918-4055 Fax:

RE: VP1049, Pilsen Superfund

STAT Project No 13070526

Dear Tonya Balla:

STAT Analysis received 5 samples for the referenced project on 7/10/2013 9:37:00 AM. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAC standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Thomas M Bauer General Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This analytical report shall become property of the Customer upon payment in full. Otherwise, STAT will be under no obligation to support, defend or discuss the analytical report.

Client: Project: Lab Order:	Weston Solutions VP1049, Pilsen Superfund 13070526		Work Orde	er Sample Summary
Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13070526-001A	BH-1 N105006-05 Split B			7/10/2013
13070526-002A	BH-2 N105006-06 Split B			7/10/2013
13070526-003A	BH-3 N105006-08 Split B			7/10/2013
13070526-004A	BH-4 N105006-09 Split B			7/10/2013
13070526-005A	BH-5 N105006-07 Split B			7/10/2013

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> **Report Date:** July 24, 2013 **Print Date:** July 24, 2013

Client: Lab Order:	Weston Solutions 13070526				Sample I g Numbe	D: BH-1 N1050 r:	006-05 Split B
Project:	VP1049, Pilsen Superfund			Colle	ection Da	te	
Lab ID:	13070526-001A				Matri	x: Soil	
Analyses		Result	RL	Qualifier	r Units	DF	Date Analyzed
Mercury		SW747	1A		Prep	Date: 7/17/2013	Analyst: LB
Mercury		2.6	0.16		mg/Kg-dry	10	7/17/2013
Metals by ICP/MS	5	SW602	0 (SW30	50B)	Prep	Date: 7/16/2013	Analyst: JG
Antimony		75	36		mg/Kg-dry	100	7/17/2013
Cadmium		1500	8.9		mg/Kg-dry	100	7/17/2013
Chromium		44	18		mg/Kg-dry	100	7/17/2013
Copper		12000	45		mg/Kg-dry	100	7/17/2013
Lead		51000	890		mg/Kg-dry	10000	7/17/2013
Tin		5800	89	*	mg/Kg-dry	100	7/17/2013
Zinc		600000	8900		mg/Kg-dry	10000	7/17/2013
Percent Moisture)	D2974			Prep	Date: 7/15/2013	Analyst: SDA
Percent Moisture		0.3	0.2	*	wt%	1	7/15/2013

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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> **Report Date:** July 24, 2013 **Print Date:** July 24, 2013

Client: Lab Ordani	Weston Solutions				-	D: BH-2 N1050	006-06 Split B
Lab Order:	13070526				g Numbe		
Project:	VP1049, Pilsen Superfund			Colle	ection Da	te	
Lab ID:	13070526-002A				Matri	x: Soil	
Analyses		Result	RL	Qualifier	r Units	DF	Date Analyzed
Mercury		SW747	1A		Prep	Date: 7/17/2013	Analyst: LB
Mercury		0.52	0.018		mg/Kg-dry	1	7/17/2013
Metals by ICP/MS	6	SW602	0 (SW30	50B)	Prep	Date: 7/16/2013	Analyst: JG
Antimony		68	39		mg/Kg-dry	100	7/17/2013
Cadmium		1100	9.7		mg/Kg-dry	100	7/17/2013
Chromium		90	19		mg/Kg-dry	100	7/17/2013
Copper		12000	48		mg/Kg-dry	100	7/17/2013
Lead		42000	970		mg/Kg-dry	10000	7/17/2013
Tin		11000	97	*	mg/Kg-dry	100	7/17/2013
Zinc		550000	9700		mg/Kg-dry	10000	7/17/2013
Percent Moisture	•	D2974			Prep	Date: 7/15/2013	Analyst: SDA
Percent Moisture		0.3	0.2	*	wt%	1	7/15/2013

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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> **Report Date:** July 24, 2013 **Print Date:** July 24, 2013

Client:	Weston Solutions			Client	Sample I	D: BH-3 N1050	006-08 Split B
Lab Order:	13070526			Та	g Numbe	r:	
Project:	VP1049, Pilsen Superfund			Colle	ction Da	te	
Lab ID:	13070526-003A				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW747 ²	1A		Prep	Date: 7/17/2013	Analyst: LB
Mercury		3.2	0.21		mg/Kg-dry	10	7/17/2013
Metals by ICP/M	S	SW602	0 (SW30	50B)	Prep	Date: 7/16/2013	Analyst: JG
Antimony		180	40		mg/Kg-dry	100	7/17/2013
Cadmium		510	9.9		mg/Kg-dry	100	7/17/2013
Chromium		92	20		mg/Kg-dry	100	7/17/2013
Copper		62000	5000		mg/Kg-dry	10000	7/17/2013
Lead		12000	990		mg/Kg-dry	10000	7/17/2013
Tin		5800	99	*	mg/Kg-dry	100	7/17/2013
Zinc		400000	9900		mg/Kg-dry	10000	7/17/2013
Percent Moistur	e	D2974			Prep	Date: 7/15/2013	Analyst: SDA
Percent Moisture		0.9	0.2	*	wt%	1	7/15/2013

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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> **Report Date:** July 24, 2013 **Print Date:** July 24, 2013

Client: Lab Order:	Weston Solutions 13070526				Sample II g Numbe	D: BH-4 N1050 r:	06-09 Split B
Project:	VP1049, Pilsen Superfund	l		Colle	ection Da	te	
Lab ID:	13070526-004A				Matri	x: Soil	
Analyses		Result	RL	Qualifie	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 7/17/2013	Analyst: LB
Mercury		1.8	0.18		mg/Kg-dry	10	7/17/2013
Metals by ICP/MS	5	SW60	20 (SW30	50B)	Prep	Date: 7/16/2013	Analyst: JG
Antimony		140	39		mg/Kg-dry	100	7/17/2013
Cadmium		500	9.7		mg/Kg-dry	100	7/17/2013
Chromium		71	19		mg/Kg-dry	100	7/17/2013
Copper		61000	4800		mg/Kg-dry	10000	7/17/2013
Lead		13000	970		mg/Kg-dry	10000	7/17/2013
Tin		5100	97	*	mg/Kg-dry	100	7/17/2013
Zinc		480000	9700		mg/Kg-dry	10000	7/17/2013
Percent Moisture	•	D2974	4		Prep	Date: 7/15/2013	Analyst: SDA
Percent Moisture		0.9	0.2	*	wt%	1	7/15/2013

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

> **Report Date:** July 24, 2013 **Print Date:** July 24, 2013

Client:	Weston Solutions			Client	Sample I	D: BH-5 N1050	06-07 Split B
Lab Order:	13070526			Та	g Numbe	r:	
Project:	VP1049, Pilsen Superfund	l		Colle	ction Da	te	
Lab ID:	13070526-005A				Matri	x: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW747	1A		Prep	Date: 7/17/2013	Analyst: LB
Mercury		5.2	0.17		mg/Kg-dry	10	7/17/2013
Metals by ICP/M	S	SW602	0 (SW30	50B)	Prep	Date: 7/16/2013	Analyst: JG
Antimony		49	35		mg/Kg-dry	100	7/17/2013
Cadmium		700	8.8		mg/Kg-dry	100	7/17/2013
Chromium		ND	18		mg/Kg-dry	100	7/17/2013
Copper		ND	4400		mg/Kg-dry	10000	7/17/2013
Lead		34000	880		mg/Kg-dry	10000	7/17/2013
Tin		6300	88	*	mg/Kg-dry	100	7/17/2013
Zinc		650000	8800		mg/Kg-dry	10000	7/17/2013
Percent Moistur	e	D2974			Prep	Date: 7/15/2013	Analyst: SDA
Percent Moisture		0.3	0.2	*	wt%	1	7/15/2013

Qualifiers:

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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	BH-2							06 Split B	1					1				
	84 - 4							08 Split B	i					v			1	
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	BH - 5				-	NIOSE	- 200	07 split B	1	-		-	-	*				
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	Relinguist	ned by: (Signature)		Date /	Time	Received by: (Signat	ure)	Reli	nguist	ed by:	(Signatui	raj	Date	/Time	Received	by: <i>(Signature)</i>
	Relinquist	ned by: (Signature	*/		Date /	Time	Received for Labora (Signature)	tory by:	-	Dat		37	Remarks			1	

Sample Receipt Checklist

Client Name EPA		Date and Tim	e Received:	7/10/2013 9:37:00 AM
Work Order Number 13070526		Received by:	TJW	
Checklist completed by: T- Uts	7/11/13 Date	Reviewed by:	NINS	-7/10/12
Matrix: Carrier r	name <u>FedEx</u>			
Shipping container/cooler in good condition?	Yes 🔽	No 🗔	Not Present	1
Custody seals intact on shippping container/cooler?	Yes 🗌	No 🗔	Not Present	1
Custody seals intact on sample bottles?	Yes 🗔	No 🗔	Not Present	i.
Chain of custody present?	Yes 🗹	No 🗌		
Chain of custody signed when relinquished and received?	Yes 🔽	No 🗔		
Chain of custody agrees with sample labels/containers?	Yes 🗹	No 🗌		
Samples in proper container/bottle?	Yes 🗹	No 🗔		
Sample containers intact?	Yes 🗹	No 🗔		
Sufficient sample volume for indicated test?	Yes 🗹	No 🗀		
All samples received within holding time?	Yes 🗹	No 🗌		
Container or Temp Blank temperature in compliance?	Yes 🗹	No 🗔	Temperatu	ure Ambient *C
Water - VOA vials have zero headspace? No VOA vials	s submitted	Yes	No 🗔	
Water - Samples pH checked?	Yes	No 🗔	Checked by:	
Water - Samples properly preserved?	Yes 🗌	No 🗌	pH Adjusted?	
Any No response must be detailed in the comments section belo	ow.			
			-775-	
Comments:				
			_	
Client / Person Date contacted:		Contac	ted by:	
Response:				

Corporation
Analysis
STAT

PREP BATCH REPORT

 Prep Start Date:
 7/16/2013
 9:50:24 A

 Prep End Date:
 7/16/2013
 1:05:00 P

 Prep Batch
 70581
 Pren Code: M

Prep Factor Units: mL / a

Prep Batch 70581	Prep Code:	M_S_PRE	EP Tec	Technician: VA		-	mL/g	.0	
Sample ID	Matrix p	pH S	iampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
IMBS2 7/16/13			1	0	0	50	50.000	7/16/2013	7/16/2013
ILCSS2 7/16/13			1	0	0	50	50.000	7/16/2013	7/16/2013
13070622-022A	Soil		1.075	0	0	50	46.512	7/16/2013	7/16/2013
13070622-023A	Soil		1.071	0	0	50	46.685	7/16/2013	7/16/2013
13070622-024A	Soil		1.108	0	0	50	45.126	7/16/2013	7/16/2013
13070622-025A	Soil		1.185	0	0	50	42.194	7/16/2013	7/16/2013
13070622-026A	Soil		1.024	0	0	50	48.828	7/16/2013	7/16/2013
13070622-027A	Soil		1.012	0	0	50	49.407	7/16/2013	7/16/2013
13070622-028A	Soil		1.093	0	0	50	45.746	7/16/2013	7/16/2013
13070622-029A	Soil		1.063	0	0	50	47.037	7/16/2013	7/16/2013
13070622-030A	Soil		1.048	0	0	50	47.710	7/16/2013	7/16/2013
13070622-031A	Soil		1.045	0	0	50	47.847	7/16/2013	7/16/2013
13070622-031AMS	Soil		1.039	0	0	50	48.123	7/16/2013	7/16/2013
13070622-031AMSD	Soil		1.047	0	0	50	47.755	7/16/2013	7/16/2013
13070622-032A	Soil		1.042	0	0	50	47.985	7/16/2013	7/16/2013
13070622-033A	Soil		1.115	0	0	50	44.843	7/16/2013	7/16/2013
13070622-034A	Soil		1.058	0	0	50	47.259	7/16/2013	7/16/2013
13070622-035A	Soil		1.194	0	0	50	41.876	7/16/2013	7/16/2013
13070526-001A	Soil		0.562	0	0	50	88.968	7/16/2013	7/16/2013
13070526-002A	Soil		0.519	0	0	50	96.339	7/16/2013	7/16/2013
13070526-003A	Soil		0.507	0	0	50	98.619	7/16/2013	7/16/2013
13070526-004A	Soil		0.521	0	0	50	95.969	7/16/2013	7/16/2013
13070526-005A	Soil		0.571	0	0	50	87.566	7/16/2013	7/16/2013
13070622-021A	Soil		1.111	0	0	50	45.005	7/16/2013	7/16/2013

CLIENT: Weston Solutions Work Order: 13070576	olutions					ANALY	VTICAI	, QC SU	ANALYTICAL QC SUMMARY REPORT	REPO]	RT
	VP1049, Pilsen Superfund						Ba	BatchID: 7	70581		
Sample ID: IMBS2 7/16/13 Client ID: ZZZZ	SampType: MBLK Batch ID: 70581	TestCod TestN	TestCode: M_ICPMS_S TestNo: SW6020	S Units: mg/Kg		Prep Date: Analysis Date:	e: 7/16/2013 e: 7/17/2013	~ ~	Run ID: ICPMS_ SeqNo: 2463021	Run ID: ICPMS_130717A SeqNo: 2463021	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony Cadmium		1.0 0.25									
Chromium Copper	89	0.50 1.2									
Lead Tin	0.0925 1.639	0.25									<u>ה *</u>
Zinc	QN	2.5									0
Sample ID: ILCSS2 7/16/13 Client ID: ZZZZ	SampType: LCS Batch ID: 70581	TestCod TestN	TestCode: M_ICPMS_S TestNo: SW6020	S Units: mg/Kg		Prep Date: Analvsis Date:	e: 7/17/2013		Run ID: ICPMS_ SeqNo: 2463022	Run ID: ICPMS_130717A SeaNo: 2463022	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	ghLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	14.68	1.0	12.5	0	117	80	120	0	0		
Cadmium	24.96	0.25	25	0	99.8	80	120	0	0		
Chromium	26.78	0.50	25	0	107	80	120	0	0		
Copper	27.12	1.2	25	0	108	80	120	0	0		
Lead	26.34	0.25	25 12 F	0.0925	105	88	120	0 0	0 0		*
Zinc	23.39	2.5 2.5	25	0	93.6	80 8	120	00			
Sample ID: 13070622-031AMS	SampType: MS Batch ID: 70581	TestCod	TestCode: M_ICPMS_S	S Units: mg/Kg-dry	dry	Prep Date:	9: 7/16/2013		Run ID: ICPMS-2	Run ID: ICPMS-2_130718A	RA BA
	Batch ID. 70301 Result		o. SVOUZU SPK value	SPK Ref Val	%REC	LowLimit	ghLimit	s RPD Ref Val	oeyivu. 240 %RPD	RPDLimit	Qual
Zinc	3123	110	28.58	3106	58.8	75	125	0	0		ა

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S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 H/HT - Holding Time Exceeded

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits * - Non Accredited Parameter

Qualifiers:

B - Analyte detected in the associated Method Blank
 E - Value above quantitation range

CLIENT: Weston Solutions Work Order: 13070576	lutions					ANALY	TICAL	oc su	ANALYTICAL QC SUMMARY REPORT	REPOI	RT
	VP1049, Pilsen Superfund						Bat	BatchID: 7	70581		
Sample ID: 13070622-031AMS Client ID: ZZZZ	SampType: MS Batch ID: 70581	TestCod	TestCode: M_ICPMS_S TestNo: SW6020	3 Units: mg/Kg-dry	(g-dry	Prep Date: Analysis Date:	: 7/16/2013 5: 7/18/2013		Run ID: ICPMS-2 SeqNo: 2464993	ICPMS-2_130718A 2464993	Ą
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony Cadmium	11.36 48.68	4.6 1.1	14.29 28.58	9.899 20.88	10.2 97.3	75 75	125 125	0 0	0 0		S
Lead Tin	4565		28.58 14.29	4337 183.9	798 -455	75 75 75	125 125	00	00		ა ზ
Sample ID: 13070622-031AMS	SampType: MS	TestCod	TestCode: M_ICPMS_S	S Units: mg/Kg-dry	(g-dry	Prep Date:	2/16/2013		Run ID: ICP	Run ID: ICPMS-2_130719A	A
Client ID: ZZZZ	Batch ID: 70581	TestN	TestNo: SW6020			Analysis Date:	e: 7/19/2013		SeqNo: 2466317	6317	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium Copper	114.2 539.5	2.3 5.7	28.58 28.58	91.32 584.7	80 -158	75 75	125 125	0 0	00		ა
Sample ID: 13070622-031AMSD	SampType: MSD	TestCod	TestCode: M_ICPMS_S	S Units: mg/Kg-dry	(g-dry	Prep Date:	: 7/16/2013		Run ID: ICP	Run ID: ICPMS-2_130718A	A
Client ID: ZZZZ	Batch ID: 70581	TestN	TestNo: SW6020			Analysis Date:	»: 7/18/2013		SeqNo: 2464941	4941	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	4577	110	28.36	3106	5190	75	125	2758	49.6	20	SR
Sample ID: 13070622-031AMSD	SampType: MSD	TestCod	TestCode: M_ICPMS_S	S Units: mg/Kg-dry	(g-dry	Prep Date:	2/16/2013		Run ID: ICP	ICPMS-2_130718A	A
Client ID: ZZZZ	Batch ID: 70581	TestN	TestNo: SW6020			Analysis Date:	»: 7/18/2013		SeqNo: 2464994	4994	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	10.07	4.5	14.18	9.899	1.19	75	125	11.36	12.1	20	S
Cadmium	59.16	1.1	28.36	20.88	135	75	125	48.68	19.4	20	S
Lead	5219	1.1	28.36	4337	3110	75	125	4565	13.4	20	ი
LII	182.1	11	14.18	183.9	-12.9	75	125	119	41.9	50	* * S

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S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 H/HT - Holding Time Exceeded

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits * - Non Accredited Parameter

Qualifiers:

,0

B - Analyte detected in the associated Method Blank
 E - Value above quantitation range

CLIENT: Work Order:	Weston Solutions 13070526	ıtions					ANAL	VTICA	ANALYTICAL QC SUMMARY REPORT	MMARY	REPOI	Z
Project:	VP1049, Pil	VP1049, Pilsen Superfund						B	BatchID: 70581	0581		
Sample ID: 13070 Client ID: 22222	622-031AMSD	Sample ID: 13070622-031AMSD SampType: MSD Client ID: ZZZZ Batch ID: 70581	TestCod TestN	stCode: M_ICPMS_ TestNo: SW6020	TestCode: M_ICPMS_S Units: mg/Kg-dry TestNo: SW6020		Prep Date: 7/16/2013 Analysis Date: 7/19/2013	Prep Date: 7/16/2013 alysis Date: 7/19/2013	13	Run ID: ICPMS-2 SeqNo: 2466320	Run ID: ICPMS-2_130719A SeqNo: 2466320	۸
Analyte		Result	PQL	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	%RPD RPDLimit Qual	Qual
Chromium Copper		126.6 678.9	2.3 5.7	28.36 28.36	91.32 584.7	125 332	75 75	125 125	114.2 539.5	10.3 22.9	20 20	SR

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits * - Non Accredited Parameter Qualifiers:

S - Spike Recovery outside accepted recovery limits
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 H/HT - Holding Time Exceeded

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 E - Value above quantitation range

Corporation
Analysis
STAT

PREP BATCH REPORT

Prep Start Date: 7/17/2013 12:45:00 Prep End Date: 7/17/2013 1:24:00 P Prep Batch 70598 Pren Code: M

Prep Factor Units: **mL / a**

Prep Batch 70598	Prep Code: I	M HG S PRE	Technician: LB		Ţ	Prep Factor Units: mL / g	:SIIL	
Sample ID	Matrix pH	H SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
HGMBS2 7/16/13		0.3	0	0	30	100.000	7/16/2013	7/16/2013
HGLCSS2 7/16/13		0.3	0	0	30	100.000	7/16/2013	7/16/2013
13070701-001B	Soil	0.349	0	0	30	85.960	7/16/2013	7/16/2013
13070512-001B	Soil	0.357	0	0	30	84.034	7/16/2013	7/16/2013
13070512-002B	Soil	0.329	0	0	30	91.185	7/16/2013	7/16/2013
13070512-002BMS	Soil	0.331	0	0	30	90.634	7/16/2013	7/16/2013
13070512-002BMSD	Soil	0.328	0	0	30	91.463	7/16/2013	7/16/2013
13070477-001B	Soil	0.372	0	0	30	80.645	7/17/2013	7/17/2013
13070477-002B	Soil	0.371	0	0	30	80.863	7/17/2013	7/17/2013
13070477-003B	Soil	0.333	0	0	30	90.090	7/17/2013	7/17/2013
13070477-004B	Soil	0.313	0	0	30	95.847	7/17/2013	7/17/2013
13070477-005B	Soil	0.363	0	0	30	82.645	7/17/2013	7/17/2013
13070477-006B	Soil	0.335	0	0	30	89.552	7/17/2013	7/17/2013
13070477-007B	Soil	0.32	0	0	30	93.750	7/17/2013	7/17/2013
13070477-008B	Soil	0.384	0	0	30	78.125	7/17/2013	7/17/2013
13070477-009B	Soil	0.36	0	0	30	83.333	7/17/2013	7/17/2013
13070477-010B	Soil	0.32	0	0	30	93.750	7/17/2013	7/17/2013
13070477-011B	Soil	0.357	0	0	30	84.034	7/17/2013	7/17/2013
13070478-001B	Soil	0.372	0	0	30	80.645	7/17/2013	7/17/2013
13070526-001A	Soil	0.384	0	0	30	78.125	7/17/2013	7/17/2013
13070526-002A	Soil	0.339	0	0	30	88.496	7/17/2013	7/17/2013
13070526-003A	Soil	0.283	0	0	30	106.007	7/17/2013	7/17/2013
13070526-004A	Soil	0.34	0	0	30	88.235	7/17/2013	7/17/2013
13070526-005A	Soil	0.359	0	0	30	83.565	7/17/2013	7/17/2013

CLIENT: Work Order:		utions					ANALY	ANALYTICAL QC SUMMARY REPORT	C SUN	IMARY	REPOF	ŁT
Project:	VP1049, Pil	VP1049, Pilsen Superfund						BatchID:		70598		
Sample ID: HG Client ID: ZZ	Sample ID: HGMBS2 7/16/13 Client ID: ZZZZ	SampType: MBLK Batch ID: 70598	TestCod TestN	sstCode: M_HG_SOI TestNo: SW7471A	TestCode: M_HG_SOLID Units: mg/Kg TestNo: SW7471A		Prep Date: 7/16/2013 Analysis Date: 7/16/2013	Prep Date: 7/16/2013 alysis Date: 7/16/2013		Run ID: CETAC_ SeqNo: 2461593	Run ID: CETAC_130716B SeqNo: 2461593	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	tef Val	%RPD	RPDLimit	Qual
Mercury		0.002	0.020									7
Sample ID: HG Client ID: ZZ	Sample ID: HGLCSS2 7/16/13 Client ID: 22222	SampType: LCS Batch ID: 70598	TestCod TestN	sstCode: M_HG_SOI TestNo: SW7471A	TestCode: M_HG_SOLID Units: mg/Kg TestNo: SW7471A		Prep Date: 7/16/2013 Analysis Date: 7/16/2013	Prep Date: 7/16/2013 Ilysis Date: 7/16/2013		Run ID: CETAC_130716B SeqNo: 2461594	AC_130716B 1594	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit	HighLimit RPD Ref Val	tef Val	%RPD	RPDLimit	Qual
Mercury		0.239	0.020	0.25	0.002	94.8	80	120	0	0		
Sample ID: 13 Client ID: ZZ	Sample ID: 13070512-002BMS Client ID: ZZZZ	SampType: MS Batch ID: 70598	TestCod TestN	sstCode: M_HG_SOI TestNo: SW7471A	TestCode: M_HG_SOLID Units: mg/Kg-dry TestNo: SW7471A		Prep Date: 7/16/2013 Analysis Date: 7/16/2013	Prep Date: 7/16/2013 alysis Date: 7/16/2013		Run ID: CETAC_ SeqNo: 2461598	Run ID: CETAC_130716B SeqNo: 2461598	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit	HighLimit RPD Ref Val	tef Val	%RPD	RPDLimit	Qual
Mercury		0.2931	0.025	0.3066	0.01111	92	75	125	0	0		
Sample ID: 13 Client ID: ZZ	Sample ID: 13070512-002BMSD Client ID: ZZZZ	SampType: MSD Batch ID: 70598	TestCod TestN	stCode: M_HG_SOI TestNo: SW7471A	TestCode: M_HG_SOLID Units: mg/Kg-dry TestNo: SW7471A		Prep Date: 7/16/2013 Analysis Date: 7/16/2013	Prep Date: 7/16/2013 alysis Date: 7/16/2013		Run ID: CETAC_ SeqNo: 2461599	Run ID: CETAC_130716B SeqNo: 2461599	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	tef Val	%RPD	RPDLimit	Qual
Mercury		0.3069	0.025	0.3094	0.01111	95.6	75	125 (0.2931	4.61	20	

S - Spike Recovery outside accepted recovery limits
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 H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blank
 E - Value above quantitation range

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits * - Non Accredited Parameter

Qualifiers:

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CLIENT: Weston Solutions Work Order: 13070526 Project: VP1049 Dilsen St	Weston Solutions 13070526 VP1049 Pilsen Sunerfund					ANAL	ANALYTICAL QC SUMMARY REPORT Batchin: R91092	SUN:	JMMARY I R91092	REPOR	T
Sample ID: PMMBK 1 7/15/13 Client ID: ZZZZ	SampType: MBLK Batch ID: R91092	TestCod	TestCode: PMOIST TestNo: D2974	Units: wt%		Prep Dat Analysis Dat	Prep Date: 7/15/2013 Analysis Date: 7/15/2013		Run ID: BALANCE_130715B SeqNo: 2460796	NCE_13071{ 96	SB
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	ıf Val	%RPD F	RPDLimit	Qual
Percent Moisture	QN	0.200									*
Sample ID: PMLCS-S 1 7/15/13 Client ID: ZZZZ	3 SampType: LCS Batch ID: R91092	TestCod	TestCode: PMOIST TestNo: D2974	Units: wt%		Prep Dat Analysis Dat	Prep Date: 7/15/2013 Analysis Date: 7/15/2013		Run ID: BALANCE_130715B SeqNo: 2460797	NCE_13071! 97	B
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	ıf Val	%RPD F	RPDLimit	Qual
Percent Moisture	4.4	0.200	5	0	88	80	120	0	0		*
Sample ID: PMLCS-W 1 7/15/13 Client ID: ZZZZ	3 SampType: LCS Batch ID: R91092	TestCod TestN	TestCode: PMOIST TestNo: D2974	Units: wt%		Prep Date: Analysis Date:	Prep Date: 7/15/2013 Analysis Date: 7/15/2013		Run ID: BALANCE_130715B SeqNo: 2460798	NCE_13071! 98	g
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	f Val	%RPD F	RPDLimit	Qual
Percent Moisture	99.84	0.200	99.8	0	100	80	120	0	0		*
Sample ID: 13070617-008B DUP Client ID: ZZZZ	P SampType: DUP Batch ID: R91092	TestCod	TestCode: PMOIST TestNo: D2974	Units: wt%		Prep Dat Analysis Dat	Prep Date: 7/15/2013 Analysis Date: 7/15/2013		Run ID: BALANCE_130715B SeqNo: 2460816	NCE_13071! 16	g
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	if Val	%RPD F	RPDLimit	Qual
Percent Moisture	13.86	0.200	0	0	0	0	0	14.94	7.50	20	*

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 * - Non Accredited Parameter

Qualifiers:

ter H/

B - Analyte detected in the associated Method Blank
 E - Value above quantitation range

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PILSEN AREA SOIL SITE CHICAGO, ILLINOIS DATA VALIDATION REPORT

Date: September 4, 2013
Laboratory: STAT Analysis Corporation (STAT), Chicago, Illinois
Laboratory Project #: 13080639
Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON[®]) Superfund Technical Assessment and Response Team (START)
Analytical TDD and Work Order #: S05-0001-1211-003/20405.016.001.2038.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 43 soil samples collected for the Pilsen Area Soil Site that were analyzed for the following parameters and U.S. Environmental Protection Agency methods:

- Total Metals by SW-846 Methods 6020 and 7471A
- Fine Grained Lead by SW-846 Method 6020
- Moisture Content by ASTM D2974

A level II data package was requested from STAT. The data validation was conducted in general accordance with the EPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review" dated January 2010. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

TOTAL METALS AND FINE GRAINED LEAD BY EPA SW-846 METHODS 6020 AND 7471A

1. <u>Samples</u>

Attachment A summarizes the samples for which this data validation is being conducted. It includes the laboratory sample identification, the WESTON START sample identification, and the date and time of sample collection.

2. <u>Holding Times</u>

The samples were analyzed within the required holding time limit of 28 days for mercury and 180 days from sample collection to analysis for all other metals.

3. Blank Results

Method blanks were analyzed with the metals analyses. The blanks contained no metals contamination above the reporting limits. There were detections of metals below the reporting limits in the blanks. However, the sample results were much greater or contained no detections of these metals. No qualifications were required.

4. <u>Laboratory Control Sample (LCS) Results</u>

The LCS recoveries were within the quality control (QC) limits except for as follows.

In one LCS, antimony was detected high. Detected antimony results were flagged "J" as estimated.

5. Matrix Spike (MS) and MS Duplicate (MSD) Results

STAT analyzed several site-specific MS/MSDs. The percent recoveries and relative percent differences (RPD) were within QC limits except for as follows.

In many instances of QC limits not being met, the sample concentration was more than four times the spike amount. In these instances, no qualifications were required.

In the MS and/or MSD of sample PA-499-01(0-6)-081413, antimony, tin, and mercury had low recoveries. In this sample, the mercury and tin results were flagged "J" and the quantitation limit for antimony was flagged "UJ" as estimated due to potential matrix interference.

In the MS and MSD of sample PA-515-01(0-6)-081613, antimony and mercury had low recoveries and tin had a high recovery. In this sample, the antimony, mercury and tin results were flagged "J" as estimated due to potential matrix interference.

In the MS and MSD of sample PA-516-01(6-18)-081613, antimony had a low recovery and tin had a high recovery. In this sample, the quantitation limit for antimony was flagged "UJ" as estimated due to potential matrix interference. Note that tin did not required qualification because it was not detected in the sample and the high MS/MSD recoveries indicate a high bias.

6. <u>Field Duplicate Results</u>

There are five field duplicate samples associated with this work order that is identified by a "D" suffix in the sample name.

The field duplicate results were evaluated by calculating the RPDs between the investigative and field duplicate sample results. There is no established QC limit for RPD for field duplicates;

however, 50 RPD is generally used for evaluation. Most of the RPDs for detected metals were below 50 which is acceptable.

There were only two instances where the RPD exceeded 50; chromium in sample PA-491-01(6-18)-081213D and mercury in sample PA-516-01(0-6)-081613D. These two discrepancies are minor and in general the field duplicate results agreed well with the investigative sample results.

7. Overall Assessment

The metals data are acceptable for use as qualified based on the information received.

GENERAL CHEMISTRY PARAMETER (Moisture Content by ASTM D2974)

1. <u>Samples</u>

Attachment A summarizes the samples for which this data validation is being conducted. It includes the laboratory sample identification, the WESTON START sample identification, and the date and time of sample collection.

2. Holding Times

The holding time for moisture is 28 days. The holding time for moisture was met.

3. Blank Results

Method blanks were analyzed with the moisture analyses and were all non-detect for moisture which is acceptable.

4. LCS Results

LCSs were analyzed with the moisture analyses. The LCS recoveries were within the QC limits.

5. <u>Laboratory Duplicates</u>

Laboratory duplicates were analyzed with the moisture analyses. The RPDs were within QC limits.

6. <u>Field Duplicate Results</u>

There are five field duplicate samples associated with this work order that are identified by a "D" suffix in the sample name.

The field duplicate results were evaluated by calculating the RPDs between the investigative and field duplicate sample results. The RPDs were below 50 which is acceptable.

7. Overall Assessment

The moisture data are acceptable for use based on the information received.

ATTACHMENT A

SAMPLE LIST

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Client: Project:	Weston Solutions Pilsen Soil Site, Pilsen, Chic	ago, IL	Work Order	Sample Summary
Lab Order:	13080639			I v
Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13080639-001A	PA-489-01(0-6)-081213		8/12/2013 2:40:00 PM	8/17/2013
13080639-001B	PA-489-01(0-6)-081213	Fine Grained	8/12/2013 2:40:00 PM	8/17/2013
13080639-002A	PA-489-01(6-18)-081213		8/12/2013 2:45:00 PM	8/17/2013
13080639-002B	PA-489-01(6-18)-081213	Fine Grained	8/12/2013 2:45:00 PM	8/17/2013
13080639-003A	PA-490-01(0-6)-081213		8/12/2013 3:30:00 PM	8/17/2013
13080639-003B	PA-490-01(0-6)-081213	Fine Grained	8/12/2013 3:30:00 PM	8/17/2013
13080639-004A	PA-491-01(0-6)-081213		8/12/2013 4:20:00 PM	8/17/2013
13080639-004B	PA-491-01(0-6)-081213	Fine Grained	8/12/2013 4:20:00 PM	8/17/2013
13080639-005A	PA-491-01(6-18)-081213		8/12/2013 4:25:00 PM	8/17/2013
13080639-005B	PA-491-01(6-18)-081213	Fine Grained	8/12/2013 4:25:00 PM	8/17/2013
13080639-006A	PA-491-01(6-18)-081213D		8/12/2013 4:30:00 PM	8/17/2013
13080639-006B	PA-491-01(6-18)-081213D	Fine Grained	8/12/2013 4:30:00 PM	8/17/2013
13080639-007A	PA-492-01(0-6)-081313		8/13/2013 10:00:00 AM	8/17/2013
13080639-007B	PA-492-01(0-6)-081313	Fine Grained	8/13/2013 10:00:00 AM	8/17/2013
13080639-008A	PA-493-01(0-6)-081313		8/13/2013 10:45:00 AM	8/17/2013
13080639-008B	PA-493-01(0-6)-081313	Fine Grained	8/13/2013 10:45:00 AM	8/17/2013
13080639-009A	PA-494-01(0-6)-081313		8/13/2013 12:00:00 PM	8/17/2013
13080639-009B	PA-494-01(0-6)-081313	Fine Grained	8/13/2013 12:00:00 PM	8/17/2013
13080639-010A	PA-495-01(0-6)-081313		8/13/2013 2:00:00 PM	8/17/2013
13080639-010B	PA-495-01(0-6)-081313	Fine Grained	8/13/2013 2:00:00 PM	8/17/2013
13080639-011A	PA-495-01(6-24)-081313		8/13/2013 2:05:00 PM	8/17/2013
13080639-011B	PA-495-01(6-24)-081313	Fine Grained	8/13/2013 2:05:00 PM	8/17/2013
13080639-012A	PA-496-01(0-6)-081313		8/13/2013 3:00:00 PM	8/17/2013
13080639-012B	PA-496-01(0-6)-081313	Fine Grained	8/13/2013 3:00:00 PM	8/17/2013
13080639-013A	PA-497-01(0-6)-081313		8/13/2013 3:50:00 PM	8/17/2013
13080639-013B	PA-497-01(0-6)-081313	Fine Grained	8/13/2013 3:50:00 PM	8/17/2013
13080639-014A	PA-498-01(0-6)-081313		8/13/2013 4:50:00 PM	8/17/2013
13080639-014B	PA-498-01(0-6)-081313	Fine Grained	8/13/2013 4:50:00 PM	8/17/2013
13080639-015A	PA-498-01(0-6)-081313D		8/13/2013 4:55:00 PM	8/17/2013
13080639-015B	PA-498-01(0-6)-081313D	Fine Grained	8/13/2013 4:55:00 PM	8/17/2013
13080639-016A	PA-498-01(6-15)-081313		8/13/2013 5:00:00 PM	8/17/2013
13080639-016B	PA-498-01(6-15)-081313	Fine Grained	8/13/2013 5:00:00 PM	8/17/2013
13080639-017A	PA-499-01(0-6)-081413		8/14/2013 9:45:00 AM	8/17/2013
13080639-017B	PA-499-01(0-6)-081413	Fine Grained	8/14/2013 9:45:00 AM	8/17/2013
13080639-018A	PA-500-01(0-6)-081413		8/14/2013 11:00:00 AM	8/17/2013
13080639-018B	PA-500-01(0-6)-081413	Fine Grained	8/14/2013 11:00:00 AM	8/17/2013
13080639-019A	PA-500-01(6-24)-081413		8/14/2013 11:05:00 AM	8/17/2013
13080639-019B	PA-500-01(6-24)-081413	Fine Grained	8/14/2013 11:05:00 AM	8/17/2013

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Client:Weston SolutionsProject:Pilsen Soil Site, Pilsen, Chicago, ILLab Order:13080639

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13080639-020A	PA-501-01(0-6)-081413		8/14/2013 12:00:00 PM	8/17/2013
13080639-020B	PA-501-01(0-6)-081413	Fine Grained	8/14/2013 12:00:00 PM	8/17/2013
13080639-021A	PA-502-01(0-6)-081413		8/14/2013 2:00:00 PM	8/17/2013
13080639-021B	PA-502-01(0-6)-081413	Fine Grained	8/14/2013 2:00:00 PM	8/17/2013
13080639-022A	PA-502-01(6-24)-081413		8/14/2013 2:05:00 PM	8/17/2013
13080639-022B	PA-502-01(6-24)-081413	Fine Grained	8/14/2013 2:05:00 PM	8/17/2013
13080639-023A	PA-503-01(0-6)-081413		8/14/2013 3:15:00 PM	8/17/2013
13080639-023B	PA-503-01(0-6)-081413	Fine Grained	8/14/2013 3:15:00 PM	8/17/2013
13080639-024A	PA-503-01(6-24)-081413		8/14/2013 3:20:00 PM	8/17/2013
13080639-024B	PA-503-01(6-24)-081413	Fine Grained	8/14/2013 3:20:00 PM	8/17/2013
13080639-025A	PA-504-01(0-6)-081513		8/15/2013 9:15:00 AM	8/17/2013
13080639-025B	PA-504-01(0-6)-081513	Fine Grained	8/15/2013 9:15:00 AM	8/17/2013
13080639-026A	PA-505-01(0-6)-081513		8/15/2013 10:25:00 AM	8/17/2013
13080639-026B	PA-505-01(0-6)-081513	Fine Grained	8/15/2013 10:25:00 AM	8/17/2013
13080639-027A	PA-505-01(0-6)-081513D		8/15/2013 10:30:00 AM	8/17/2013
13080639-027B	PA-505-01(0-6)-081513D	Fine Grained	8/15/2013 10:30:00 AM	8/17/2013
13080639-028A	PA-506-01(0-6)-081513		8/15/2013 11:40:00 AM	8/17/2013
13080639-028B	PA-506-01(0-6)-081513	Fine Grained	8/15/2013 11:40:00 AM	8/17/2013
13080639-029A	PA-507-01(0-6)-081513		8/15/2013 1:30:00 PM	8/17/2013
13080639-029B	PA-507-01(0-6)-081513	Fine Grained	8/15/2013 1:30:00 PM	8/17/2013
13080639-030A	PA-508-01(0-6)-081513		8/15/2013 2:45:00 PM	8/17/2013
13080639-030B	PA-508-01(0-6)-081513	Fine Grained	8/15/2013 2:45:00 PM	8/17/2013
13080639-031A	PA-508-01(6-24)-081513		8/15/2013 2:50:00 PM	8/17/2013
13080639-031B	PA-508-01(6-24)-081513	Fine Grained	8/15/2013 2:50:00 PM	8/17/2013
13080639-032A	PA-509-01(0-6)-081513		8/15/2013 4:00:00 PM	8/17/2013
13080639-032B	PA-509-01(0-6)-081513	Fine Grained	8/15/2013 4:00:00 PM	8/17/2013
13080639-033A	PA-510-01(0-6)-081513		8/15/2013 4:50:00 PM	8/17/2013
13080639-033B	PA-510-01(0-6)-081513	Fine Grained	8/15/2013 4:50:00 PM	8/17/2013
13080639-034A	PA-511-01(0-6)-081613		8/16/2013 8:30:00 AM	8/17/2013
13080639-034B	PA-511-01(0-6)-081613	Fine Grained	8/16/2013 8:30:00 AM	8/17/2013
13080639-035A	PA-512-01(0-6)-081613		8/16/2013 9:20:00 AM	8/17/2013
13080639-035B	PA-512-01(0-6)-081613	Fine Grained	8/16/2013 9:20:00 AM	8/17/2013
13080639-036A	PA-513-01(0-6)-081613		8/16/2013 9:50:00 AM	8/17/2013
13080639-036B	PA-513-01(0-6)-081613	Fine Grained	8/16/2013 9:50:00 AM	8/17/2013
13080639-037A	PA-513-01(0-6)-081613D		8/16/2013 9:55:00 AM	8/17/2013
13080639-037B	PA-513-01(0-6)-081613D	Fine Grained	8/16/2013 9:55:00 AM	8/17/2013
13080639-038A	PA-514-01(0-6)-081613		8/16/2013 11:25:00 AM	8/17/2013
13080639-038B	PA-514-01(0-6)-081613	Fine Grained	8/16/2013 11:25:00 AM	8/17/2013
13080639-039A	PA-514-01(6-24)-081613		8/16/2013 11:30:00 AM	8/17/2013
13080639-039B	PA-514-01(6-24)-081613	Fine Grained	8/16/2013 11:30:00 AM	8/17/2013

Client:	Weston Solutions
Project:	Pilsen Soil Site, Pilsen, Chicago, IL
Lab Order:	13080639

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13080639-040A	PA-515-01(0-6)-081613		8/16/2013 1:30:00 PM	8/17/2013
13080639-040B	PA-515-01(0-6)-081613	Fine Grained	8/16/2013 1:30:00 PM	8/17/2013
13080639-041A	PA-516-01(0-6)-081613		8/16/2013 2:50:00 PM	8/17/2013
13080639-041B	PA-516-01(0-6)-081613	Fine Grained	8/16/2013 2:50:00 PM	8/17/2013
13080639-042A	PA-516-01(0-6)-081613D		8/16/2013 2:55:00 PM	8/17/2013
13080639-042B	PA-516-01(0-6)-081613D	Fine Grained	8/16/2013 2:55:00 PM	8/17/2013
13080639-043A	PA-516-01(6-18)-081613		8/16/2013 3:00:00 PM	8/17/2013
13080639-043B	PA-516-01(6-18)-081613	Fine Grained	8/16/2013 3:00:00 PM	8/17/2013

ATTACHMENT B

STAT ANALYSIS CORPORATION RESULTS SUMMARY WITH QUALIFIERS

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel; (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001;AIHA 101160; NVLAP LabCode 101202-

August 26, 2013

Weston Solutions 750 E. Bunker Court Suite 500 Vernon Hills, IL 60061 Telephone: (847) 918-4094 Fax: (847) 918-4055

RE: Pilsen Soil Site, Pilsen, Chicago, IL

STAT Project No: 13080639

Dear Tonya Balla:

STAT Analysis received 43 samples for the referenced project on 8/16/2013 4:42:00 PM. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAC standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

eated A

Catia Giannini Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This analytical report shall be come property of the Customer upon payment in full. Otherwise, STAT will be under no obligation to support, defend or discuss the analytical report.

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Client: Project:	Weston Solutions Pilsen Soil Site, Pilsen, Chic	ago, IL	Work Order	Sample Summary
Lab Order:	13080639			I v
Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13080639-001A	PA-489-01(0-6)-081213		8/12/2013 2:40:00 PM	8/17/2013
13080639-001B	PA-489-01(0-6)-081213	Fine Grained	8/12/2013 2:40:00 PM	8/17/2013
13080639-002A	PA-489-01(6-18)-081213		8/12/2013 2:45:00 PM	8/17/2013
13080639-002B	PA-489-01(6-18)-081213	Fine Grained	8/12/2013 2:45:00 PM	8/17/2013
13080639-003A	PA-490-01(0-6)-081213		8/12/2013 3:30:00 PM	8/17/2013
13080639-003B	PA-490-01(0-6)-081213	Fine Grained	8/12/2013 3:30:00 PM	8/17/2013
13080639-004A	PA-491-01(0-6)-081213		8/12/2013 4:20:00 PM	8/17/2013
13080639-004B	PA-491-01(0-6)-081213	Fine Grained	8/12/2013 4:20:00 PM	8/17/2013
13080639-005A	PA-491-01(6-18)-081213		8/12/2013 4:25:00 PM	8/17/2013
13080639-005B	PA-491-01(6-18)-081213	Fine Grained	8/12/2013 4:25:00 PM	8/17/2013
13080639-006A	PA-491-01(6-18)-081213D		8/12/2013 4:30:00 PM	8/17/2013
13080639-006B	PA-491-01(6-18)-081213D	Fine Grained	8/12/2013 4:30:00 PM	8/17/2013
13080639-007A	PA-492-01(0-6)-081313		8/13/2013 10:00:00 AM	8/17/2013
13080639-007B	PA-492-01(0-6)-081313	Fine Grained	8/13/2013 10:00:00 AM	8/17/2013
13080639-008A	PA-493-01(0-6)-081313		8/13/2013 10:45:00 AM	8/17/2013
13080639-008B	PA-493-01(0-6)-081313	Fine Grained	8/13/2013 10:45:00 AM	8/17/2013
13080639-009A	PA-494-01(0-6)-081313		8/13/2013 12:00:00 PM	8/17/2013
13080639-009B	PA-494-01(0-6)-081313	Fine Grained	8/13/2013 12:00:00 PM	8/17/2013
13080639-010A	PA-495-01(0-6)-081313		8/13/2013 2:00:00 PM	8/17/2013
13080639-010B	PA-495-01(0-6)-081313	Fine Grained	8/13/2013 2:00:00 PM	8/17/2013
13080639-011A	PA-495-01(6-24)-081313		8/13/2013 2:05:00 PM	8/17/2013
13080639-011B	PA-495-01(6-24)-081313	Fine Grained	8/13/2013 2:05:00 PM	8/17/2013
13080639-012A	PA-496-01(0-6)-081313		8/13/2013 3:00:00 PM	8/17/2013
13080639-012B	PA-496-01(0-6)-081313	Fine Grained	8/13/2013 3:00:00 PM	8/17/2013
13080639-013A	PA-497-01(0-6)-081313		8/13/2013 3:50:00 PM	8/17/2013
13080639-013B	PA-497-01(0-6)-081313	Fine Grained	8/13/2013 3:50:00 PM	8/17/2013
13080639-014A	PA-498-01(0-6)-081313		8/13/2013 4:50:00 PM	8/17/2013
13080639-014B	PA-498-01(0-6)-081313	Fine Grained	8/13/2013 4:50:00 PM	8/17/2013
13080639-015A	PA-498-01(0-6)-081313D		8/13/2013 4:55:00 PM	8/17/2013
13080639-015B	PA-498-01(0-6)-081313D	Fine Grained	8/13/2013 4:55:00 PM	8/17/2013
13080639-016A	PA-498-01(6-15)-081313		8/13/2013 5:00:00 PM	8/17/2013
13080639-016B	PA-498-01(6-15)-081313	Fine Grained	8/13/2013 5:00:00 PM	8/17/2013
13080639-017A	PA-499-01(0-6)-081413		8/14/2013 9:45:00 AM	8/17/2013
13080639-017B	PA-499-01(0-6)-081413	Fine Grained	8/14/2013 9:45:00 AM	8/17/2013
13080639-018A	PA-500-01(0-6)-081413		8/14/2013 11:00:00 AM	8/17/2013
13080639-018B	PA-500-01(0-6)-081413	Fine Grained	8/14/2013 11:00:00 AM	8/17/2013
13080639-019A	PA-500-01(6-24)-081413		8/14/2013 11:05:00 AM	8/17/2013
13080639-019B	PA-500-01(6-24)-081413	Fine Grained	8/14/2013 11:05:00 AM	8/17/2013

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Client:Weston SolutionsProject:Pilsen Soil Site, Pilsen, Chicago, ILLab Order:13080639

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13080639-020A	PA-501-01(0-6)-081413		8/14/2013 12:00:00 PM	8/17/2013
13080639-020B	PA-501-01(0-6)-081413	Fine Grained	8/14/2013 12:00:00 PM	8/17/2013
13080639-021A	PA-502-01(0-6)-081413		8/14/2013 2:00:00 PM	8/17/2013
13080639-021B	PA-502-01(0-6)-081413	Fine Grained	8/14/2013 2:00:00 PM	8/17/2013
13080639-022A	PA-502-01(6-24)-081413		8/14/2013 2:05:00 PM	8/17/2013
13080639-022B	PA-502-01(6-24)-081413	Fine Grained	8/14/2013 2:05:00 PM	8/17/2013
13080639-023A	PA-503-01(0-6)-081413		8/14/2013 3:15:00 PM	8/17/2013
13080639-023B	PA-503-01(0-6)-081413	Fine Grained	8/14/2013 3:15:00 PM	8/17/2013
13080639-024A	PA-503-01(6-24)-081413		8/14/2013 3:20:00 PM	8/17/2013
13080639-024B	PA-503-01(6-24)-081413	Fine Grained	8/14/2013 3:20:00 PM	8/17/2013
13080639-025A	PA-504-01(0-6)-081513		8/15/2013 9:15:00 AM	8/17/2013
13080639-025B	PA-504-01(0-6)-081513	Fine Grained	8/15/2013 9:15:00 AM	8/17/2013
13080639-026A	PA-505-01(0-6)-081513		8/15/2013 10:25:00 AM	8/17/2013
13080639-026B	PA-505-01(0-6)-081513	Fine Grained	8/15/2013 10:25:00 AM	8/17/2013
13080639-027A	PA-505-01(0-6)-081513D		8/15/2013 10:30:00 AM	8/17/2013
13080639-027B	PA-505-01(0-6)-081513D	Fine Grained	8/15/2013 10:30:00 AM	8/17/2013
13080639-028A	PA-506-01(0-6)-081513		8/15/2013 11:40:00 AM	8/17/2013
13080639-028B	PA-506-01(0-6)-081513	Fine Grained	8/15/2013 11:40:00 AM	8/17/2013
13080639-029A	PA-507-01(0-6)-081513		8/15/2013 1:30:00 PM	8/17/2013
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13080639-030B	PA-508-01(0-6)-081513	Fine Grained	8/15/2013 2:45:00 PM	8/17/2013
13080639-031A	PA-508-01(6-24)-081513		8/15/2013 2:50:00 PM	8/17/2013
13080639-031B	PA-508-01(6-24)-081513	Fine Grained	8/15/2013 2:50:00 PM	8/17/2013
13080639-032A	PA-509-01(0-6)-081513		8/15/2013 4:00:00 PM	8/17/2013
13080639-032B	PA-509-01(0-6)-081513	Fine Grained	8/15/2013 4:00:00 PM	8/17/2013
13080639-033A	PA-510-01(0-6)-081513		8/15/2013 4:50:00 PM	8/17/2013
13080639-033B	PA-510-01(0-6)-081513	Fine Grained	8/15/2013 4:50:00 PM	8/17/2013
13080639-034A	PA-511-01(0-6)-081613		8/16/2013 8:30:00 AM	8/17/2013
13080639-034B	PA-511-01(0-6)-081613	Fine Grained	8/16/2013 8:30:00 AM	8/17/2013
13080639-035A	PA-512-01(0-6)-081613		8/16/2013 9:20:00 AM	8/17/2013
13080639-035B	PA-512-01(0-6)-081613	Fine Grained	8/16/2013 9:20:00 AM	8/17/2013
13080639-036A	PA-513-01(0-6)-081613		8/16/2013 9:50:00 AM	8/17/2013
13080639-036B	PA-513-01(0-6)-081613	Fine Grained	8/16/2013 9:50:00 AM	8/17/2013
13080639-037A	PA-513-01(0-6)-081613D		8/16/2013 9:55:00 AM	8/17/2013
13080639-037B	PA-513-01(0-6)-081613D	Fine Grained	8/16/2013 9:55:00 AM	8/17/2013
13080639-038A	PA-514-01(0-6)-081613		8/16/2013 11:25:00 AM	8/17/2013
13080639-038B	PA-514-01(0-6)-081613	Fine Grained	8/16/2013 11:25:00 AM	8/17/2013
13080639-039A	PA-514-01(6-24)-081613		8/16/2013 11:30:00 AM	8/17/2013
13080639-039B	PA-514-01(6-24)-081613	Fine Grained	8/16/2013 11:30:00 AM	8/17/2013

Client:	Weston Solutions
Project:	Pilsen Soil Site, Pilsen, Chicago, IL
Lab Order:	13080639

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
13080639-040A	PA-515-01(0-6)-081613		8/16/2013 1:30:00 PM	8/17/2013
13080639-040B	PA-515-01(0-6)-081613	Fine Grained	8/16/2013 1:30:00 PM	8/17/2013
13080639-041A	PA-516-01(0-6)-081613		8/16/2013 2:50:00 PM	8/17/2013
13080639-041B	PA-516-01(0-6)-081613	Fine Grained	8/16/2013 2:50:00 PM	8/17/2013
13080639-042A	PA-516-01(0-6)-081613D		8/16/2013 2:55:00 PM	8/17/2013
13080639-042B	PA-516-01(0-6)-081613D	Fine Grained	8/16/2013 2:55:00 PM	8/17/2013
13080639-043A	PA-516-01(6-18)-081613		8/16/2013 3:00:00 PM	8/17/2013
13080639-043B	PA-516-01(6-18)-081613	Fine Grained	8/16/2013 3:00:00 PM	8/17/2013

CLIENT:	Weston Solutions	
Project: Lab Order:	Pilsen Soil Site, Pilsen, Chicago, IL 13080639	CASE NARRATIVE
	1000007	

Sample report lists:

Fraction A: Results on "as received" basis that the results are corrected for percent moisture. Fraction B: Fine Grained (less than 250 μ m sieve size) The soils were air dried and sieved for particle size.

The total metals Matrix Spike/Matrix Spike Duplicate (MS/MSD) prepared from sample PA-515-01(0-6)-081613 (13080639-040) (Prep Batch 71453) had recoveries outside control limits. The sample, MS and MSD were redigested in batch 71524. Results are still outside control limits and reported from batch 71524.

Please refer to Analytical QC Summary Report for other QC outliers.

				R	eport Date:	August 26, 20)13
					Print Date:	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-489-01(0-0	5)-081213
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/12/2013 2:40):00 PM
Lab ID:	13080639-001A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	Analyst: LB
Mercury		0.14	0.022		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.2	-	mg/Kg-dry	20	8/22/2013
Cadmium		1.4	1		mg/Kg-dry	20	8/22/2013
Chromium		17	2.1		mg/Kg-dry	20	8/22/2013
Copper		30	5.2		mg/Kg-dry	20	8/22/2013
Lead		160	1		mg/Kg-dry	20	8/22/2013
Tin		ND	10	*	mg/Kg-dry	20	8/22/2013
Zinc		140	10		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	B Analyst: SDA
Percent Moisture		15.3	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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				Re	eport Date:	August 2	6, 2013
]	Print Date:	August 2	6, 2013
Client:	Weston Solutions			Client S	ample ID:	PA-489-0	01(0-6)-081213
Lab Order:	13080639			Та	g Number:	Fine Grai	ined
Project:	Pilsen Soil Site, Pilsen, Chicag	go, IL		Colle	ction Date:	8/12/2013	3 2:40:00 PM
Lab ID:	13080639-001B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	S	SW6020 160	(SW3 4.7	,	Prep I mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-489-01(6-1	18)-081213
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/12/2013 2:45	5:00 PM
Lab ID:	13080639-002A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	Analyst: LB
Mercury		0.13	0.022		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.4		mg/Kg-dry	20	8/22/2013
Cadmium		1.4	1.1		mg/Kg-dry	20	8/22/2013
Chromium		18	2.2		mg/Kg-dry	20	8/22/2013
Copper		28	5.5		mg/Kg-dry	20	8/22/2013
Lead		92	1.1		mg/Kg-dry	20	8/22/2013
Tin		ND	11	*	mg/Kg-dry	20	8/22/2013
Zinc		120	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	B Analyst: SDA
Percent Moisture		16.5	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August	26, 2013
				Print Date:	: August 2	26, 2013
Client:	Weston Solutions		Clien	t Sample ID:	PA-489-	01(6-18)-081213
Lab Order:	13080639		,	Tag Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL	Со	llection Date:	8/12/201	3 2:45:00 PM
Lab ID:	13080639-002B			Matrix	Soil	
Analyses		Result	RL Qualif	ier Units	DF	Date Analyzed
Metals by ICP/M	S	SW602 150	0 (SW3050B) 4.6	Prep mg/Kg-dry	Date: 8/22 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20)13
]	Print Date	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-490-01(0-6	6)-081213
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	icago, IL Collection Date: 8/12/2013 3:30:00 PM				
Lab ID:	13080639-003A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	B Analyst: LB
Mercury		0.29	0.019		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.4	-	mg/Kg-dry	20	8/22/2013
Cadmium		1.6	1.1		mg/Kg-dry	20	8/22/2013
Chromium		19	2.2		mg/Kg-dry	20	8/22/2013
Copper		33	5.6		mg/Kg-dry	20	8/22/2013
Lead		220	1.1		mg/Kg-dry	20	8/22/2013
Tin		ND	11	*	mg/Kg-dry	20	8/22/2013
Zinc		150	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	1		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		16.7	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 2	26, 2013
					Print Date:	August 2	26, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-490-0	01(0-6)-081213
Lab Order:	13080639			Та	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chicag	go, IL		Colle	ction Date:	8/12/2013	3 3:30:00 PM
Lab ID:	13080639-003B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	IS	SW6020 230	(SW3 4.7	,	Prep mg/Kg-dry	Date: 8/22/ 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-491-01(0-0	5)-081213
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/12/2013 4:20):00 PM
Lab ID:	13080639-004A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	Analyst: LB
Mercury		0.42	0.024		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.8	-	mg/Kg-dry	20	8/22/2013
Cadmium		1.8	1.2		mg/Kg-dry	20	8/22/2013
Chromium		21	2.4		mg/Kg-dry	20	8/22/2013
Copper		68	6		mg/Kg-dry	20	8/22/2013
Lead		260	1.2		mg/Kg-dry	20	8/22/2013
Tin		16	12	*	mg/Kg-dry	20	8/22/2013
Zinc		270	12		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		17.4	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:J - Analyte detected below quantitation limitsB - Analyte detected in the associated Method Blank		S - Spike Recovery outside accepted recovery limits
		R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 2	6, 2013
					Print Date:	August 2	6, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-491-0	01(0-6)-081213
Lab Order:	13080639			Та	g Number:	Fine Grai	ined
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Date:	8/12/2013	3 4:20:00 PM
Lab ID:	13080639-004B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Metals by ICP/M Lead	8	SW6020 280	(SW3 4.9	,	Prep mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	August 26, 20)13
Client:	Weston Solutions			Client S	Sample ID:	PA-491-01(6-2	18)-081213
Lab Order:	13080639			Ta	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	hicago, IL		Colle	ction Date:	8/12/2013 4:25	5:00 PM
Lab ID:	13080639-005A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	B Analyst: LB
Mercury		0.6	0.022		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS	;	SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.5		mg/Kg-dry	20	8/22/2013
Cadmium		1.6	1.1		mg/Kg-dry	20	8/22/2013
Chromium		36	2.2		mg/Kg-dry	20	8/22/2013
Copper		71	5.6		mg/Kg-dry	20	8/22/2013
Lead		270	1.1		mg/Kg-dry	20	8/22/2013
Tin		15	11	*	mg/Kg-dry	20	8/22/2013
Zinc		250	11		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		13.8	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26	5, 2013
					Print Date:	August 26	5, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-491-01	(6-18)-081213
Lab Order:	13080639			Та	g Number:	Fine Grair	ned
Project:	Pilsen Soil Site, Pilsen, Chicag	go, IL		Colle	ction Date:	8/12/2013	4:25:00 PM
Lab ID:	13080639-005B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	· Units	DF	Date Analyzed
Metals by ICP/I Lead	MS	SW6020 400	(SW3 4.7	,	Prep l mg/Kg-dry	Date: 8/22/2 100	013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20	13
]	Print Date	: August 26, 20	13
Client:	Weston Solutions			Client S	ample ID:	PA-491-01(6-1	8)-081213D
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	icago, IL Collection Date: 8/12/2013 4:30:00 PM				
Lab ID:	13080639-006A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	Analyst: LB
Mercury		0.66	0.02		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS	6	SW602	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.1		mg/Kg-dry	20	8/22/2013
Cadmium		1.5	1		mg/Kg-dry	20	8/22/2013
Chromium		17	2		mg/Kg-dry	20	8/22/2013
Copper		65	5.1		mg/Kg-dry	20	8/22/2013
Lead		260	1		mg/Kg-dry	20	8/22/2013
Tin		16	10	*	mg/Kg-dry	20	8/22/2013
Zinc		230	10		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974			Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		12.2	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis			
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits			
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits			
	HT - Sample received past holding time	E - Value above quantitation range			
	* - Non-accredited parameter	H - Holding time exceeded			

				Re	eport Date:	August 2	6, 2013
					Print Date:	August 2	6, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-491-0	1(6-18)-081213D
Lab Order:	13080639			Та	g Number:	Fine Grai	ned
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL		Colle	ction Date:	8/12/2013	4:30:00 PM
Lab ID:	13080639-006B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	IS	SW6020 390	(SW3 4.8	,	Prep mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-492-01(0-0	6)-081313
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/13/2013 10:0	00:00 AM
Lab ID:	13080639-007A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	3 Analyst: LB
Mercury		0.33	0.02		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS	i	SW602	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.4		mg/Kg-dry	20	8/22/2013
Cadmium		2.7	1.1		mg/Kg-dry	20	8/22/2013
Chromium		24	2.2		mg/Kg-dry	20	8/22/2013
Copper		66	5.5		mg/Kg-dry	20	8/22/2013
Lead		260	1.1		mg/Kg-dry	20	8/22/2013
Tin		13	11	*	mg/Kg-dry	20	8/22/2013
Zinc		210	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	ļ		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		17.7	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August 2	26, 2013
				Print Date	: August 2	26, 2013
Client:	Weston Solutions		Clie	nt Sample ID:	PA-492-0	01(0-6)-081313
Lab Order:	13080639			Tag Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chic	cago, IL	C	ollection Date:	8/13/201	3 10:00:00 AM
Lab ID:	13080639-007B			Matrix	: Soil	
Analyses		Result	RL Quali	fier Units	DF	Date Analyzed
Metals by ICP/M	S	SW602 210	0 (SW3050B) 4.8	Prep mg/Kg-dry	Date: 8/22	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	August 26, 20)13
Client:	Weston Solutions			Client S	Sample ID:	PA-493-01(0-	6)-081313
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/13/2013 10:4	45:00 AM
Lab ID:	13080639-008A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	B Analyst: LB
Mercury		0.39	0.022		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.3	-	mg/Kg-dry	20	8/22/2013
Cadmium		1.8	1.1		mg/Kg-dry	20	8/22/2013
Chromium		16	2.2		mg/Kg-dry	20	8/22/2013
Copper		45	5.4		mg/Kg-dry	20	8/22/2013
Lead		190	1.1		mg/Kg-dry	20	8/22/2013
Tin		ND	11	*	mg/Kg-dry	20	8/22/2013
Zinc		170	11		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	1		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		18.5	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	port Date:	August 2	26, 2013
				I	Print Date:	August 2	26, 2013
Client:	Weston Solutions			Client S	ample ID:	PA-493-(01(0-6)-081313
Lab Order:	13080639			Тая	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chic	ago, IL		Collec	tion Date:	8/13/201	3 10:45:00 AM
Lab ID:	13080639-008B				Matrix:	Soil	
Analyses		Result	RL (Qualifier	Units	DF	Date Analyzed
Metals by ICP/M	3	SW602 210	0 (SW30 4.8	,	Prep l mg/Kg-dry	Date: 8/22/ 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-494-01(0-6	5)-081313
Lab Order:	13080639			Та	ng Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/13/2013 12:0	00:00 PM
Lab ID:	13080639-009A				Matrix	Soil	
Analyses		Result	RL	Qualifier	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/19/2013	Analyst: LB
Mercury		0.17	0.023		mg/Kg-dry	1	8/20/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.6	-	mg/Kg-dry	20	8/22/2013
Cadmium		2	1.2		mg/Kg-dry	20	8/22/2013
Chromium		33	2.3		mg/Kg-dry	20	8/22/2013
Copper		46	5.8		mg/Kg-dry	20	8/22/2013
Lead		120	1.2		mg/Kg-dry	20	8/22/2013
Tin		ND	12	*	mg/Kg-dry	20	8/22/2013
Zinc		170	12		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	ļ.		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		17.9	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	port Date:	August 26,	2013
				I	Print Date:	August 26,	2013
Client:	Weston Solutions			Client S	ample ID:	PA-494-01(0-6)-081313
Lab Order:	13080639			Та	g Number:	Fine Graine	ed
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Collec	ction Date:	8/13/2013 1	2:00:00 PM
Lab ID:	13080639-009B				Matrix:	Soil	
Analyses		Result	RL (Qualifier	Units	DF	Date Analyzed
Metals by ICP/M	S	SW602	0 (SW30 4.9	,	Prep l mg/Kg-dry	Date: 8/22/20 100	13 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	August 26, 20)13
Client:	Weston Solutions			Client S	Sample ID:	PA-495-01(0-	6)-081313
Lab Order:	13080639			Ta	ng Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/13/2013 2:00):00 PM
Lab ID:	13080639-010A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	B Analyst: LB
Mercury		0.31	0.022		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	;	SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	3.8		mg/Kg-dry	20	8/22/2013
Cadmium		2.6	0.95		mg/Kg-dry	20	8/22/2013
Chromium		25	1.9		mg/Kg-dry	20	8/22/2013
Copper		56	4.8		mg/Kg-dry	20	8/22/2013
Lead		930	0.95		mg/Kg-dry	20	8/22/2013
Tin		16	9.5	*	mg/Kg-dry	20	8/22/2013
Zinc		430	9.5		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		13.8	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August 2	26, 2013
				Print Date:	: August 2	26, 2013
Client:	Weston Solutions		Clier	t Sample ID:	PA-495-(01(0-6)-081313
Lab Order:	13080639			Tag Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chic	ago, IL	Co	llection Date:	8/13/2013	3 2:00:00 PM
Lab ID:	13080639-010B			Matrix	Soil	
Analyses		Result	RL Qualif	ier Units	DF	Date Analyzed
Metals by ICP/M	S	SW602 1000	0 (SW3050B) 4.8	Prep ma/Ka-dry	Date: 8/22/ 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis			
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits			
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits			
	HT - Sample received past holding time	E - Value above quantitation range			
	* - Non-accredited parameter	H - Holding time exceeded			

				R	eport Date:	August 26, 20	013
				•	Print Date	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-495-01(6-	24)-081313
Lab Order:	13080639			Ta	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	hicago, IL	ago, IL Collection Date: 8/13/2013 2:05:00 PM				
Lab ID:	13080639-011A				Matrix	: Soil	
Analyses		Result	RL	Qualifier	· Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/201	3 Analyst: LB
Mercury		0.49	0.019		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	6	SW60	20 (SW3	050B)	Prep	Date: 8/20/201	3 Analyst: JG
Antimony		ND	4		mg/Kg-dry	20	8/22/2013
Cadmium		3.6	1		mg/Kg-dry	20	8/22/2013
Chromium		21	2		mg/Kg-dry	20	8/22/2013
Copper		180	5.1		mg/Kg-dry	20	8/22/2013
Lead		1800	1		mg/Kg-dry	20	8/22/2013
Tin		50	10	*	mg/Kg-dry	20	8/22/2013
Zinc		720	10		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	4		Prep	Date: 8/20/201	3 Analyst: SDA
Percent Moisture		15.6	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August 26, 20	13
				Print Date:	August 26, 20	13
Client:	Weston Solutions		Clier	nt Sample ID:	PA-495-01(6-2	4)-081313
Lab Order:	13080639			Tag Number:	Fine Grained	
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL	Co	llection Date:	8/13/2013 2:05	:00 PM
Lab ID:	13080639-011B			Matrix:	Soil	
Analyses		Result	RL Qualif	ier Units	DF 3	Date Analyzed
Metals by ICP/M Lead	IS	SW6020 1800	(SW3050B) 5	Prep l mg/Kg-dry	Date: 8/22/2013 100	Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-496-01(0-	6)-081313
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	IL Collection Date: 8/13/2013 3:00:00 PM			0:00 PM	
Lab ID:	13080639-012A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	3 Analyst: LB
Mercury		0.12	0.021		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	4.4	-	mg/Kg-dry	20	8/22/2013
Cadmium		2.8	1.1		mg/Kg-dry	20	8/22/2013
Chromium		19	2.2		mg/Kg-dry	20	8/22/2013
Copper		64	5.5		mg/Kg-dry	20	8/22/2013
Lead		230	1.1		mg/Kg-dry	20	8/22/2013
Tin		11	11	*	mg/Kg-dry	20	8/22/2013
Zinc		380	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		11.9	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 2	6, 2013
]	Print Date:	August 2	6, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-496-0	01(0-6)-081313
Lab Order:	13080639			Та	g Number:	Fine Grai	ined
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Date:	8/13/2013	3 3:00:00 PM
Lab ID:	13080639-012B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/Ms	3	SW6020 360	(SW3) 4.6	,	Prep mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13	
					Print Date:	: August 26, 20	August 26, 2013	
Client:	Weston Solutions			Client S	Sample ID:	PA-497-01(0-	6)-081313	
Lab Order:	13080639			Ta	g Number:			
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	Collection Date: 8/13/2013 3:50:00 PM					
Lab ID:	13080639-013A				Matrix	Soil		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Mercury		SW74	71A		Prep	Date: 8/20/2013	3 Analyst: LB	
Mercury		0.4	0.024		mg/Kg-dry	1	8/21/2013	
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	3 Analyst: JG	
Antimony		ND	4.4		mg/Kg-dry	20	8/22/2013	
Cadmium		2.2	1.1		mg/Kg-dry	20	8/22/2013	
Chromium		18	2.2		mg/Kg-dry	20	8/22/2013	
Copper		53	5.5		mg/Kg-dry	20	8/22/2013	
Lead		460	1.1		mg/Kg-dry	20	8/22/2013	
Tin		15	11	*	mg/Kg-dry	20	8/22/2013	
Zinc		350	11		mg/Kg-dry	20	8/22/2013	
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	3 Analyst: SDA	
Percent Moisture		19.6	0.2	*	wt%	1	8/20/2013	

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	: August 2	6, 2013
				Print Date	: August 2	6, 2013
Client:	Weston Solutions		Cli	ent Sample ID:	PA-497-0	1(0-6)-081313
Lab Order:	13080639			Tag Number	Fine Grai	ned
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL	0	collection Date	: 8/13/2013	3:50:00 PM
Lab ID:	13080639-013B			Matrix	: Soil	
Analyses		Result	RL Qual	ifier Units	DF	Date Analyzed
Metals by ICP/M	S	SW6020 460	(SW3050B) 4.9	Prep mg/Kg-dry	Date: 8/22/ 2	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13	
					Print Date:	August 26, 20	August 26, 2013	
Client:	Weston Solutions			Client S	Sample ID:	PA-498-01(0-0	6)-081313	
Lab Order:	13080639			Ta	g Number:			
Project:	Pilsen Soil Site, Pilsen, C	Thicago, IL		Colle	ction Date:	8/13/2013 4:50):00 PM	
Lab ID:	13080639-014A				Matrix:	Soil		
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed	
Mercury		SW74	71A		Prep	Date: 8/20/2013	B Analyst: LB	
Mercury		0.17	0.02		mg/Kg-dry	1	8/21/2013	
Metals by ICP/MS	6	SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG	
Antimony		ND	3.9		mg/Kg-dry	20	8/22/2013	
Cadmium		1.5	0.97		mg/Kg-dry	20	8/22/2013	
Chromium		16	1.9		mg/Kg-dry	20	8/22/2013	
Copper		38	4.8		mg/Kg-dry	20	8/22/2013	
Lead		270	0.97		mg/Kg-dry	20	8/22/2013	
Tin		ND	9.7	*	mg/Kg-dry	20	8/22/2013	
Zinc		200	9.7		mg/Kg-dry	20	8/22/2013	
Percent Moisture	9	D2974	ļ		Prep	Date: 8/20/2013	Analyst: SDA	
Percent Moisture		13.8	0.2	*	wt%	1	8/20/2013	

ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
HT - Sample received past holding time	E - Value above quantitation range
* - Non-accredited parameter	H - Holding time exceeded
	J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

				Re	eport Date:	August 26	, 2013
]	Print Date:	August 26	, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-498-01	.(0-6)-081313
Lab Order:	13080639			Та	g Number:	Fine Grain	ned
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Date:	8/13/2013	4:50:00 PM
Lab ID:	13080639-014B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/M	3	SW6020 340	(SW3 4.6	,	Prep mg/Kg-dry	Date: 8/22/2 100	013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20	13	
					Print Date:	: August 26, 20	August 26, 2013	
Client:	Weston Solutions			Client S	Sample ID:	PA-498-01(0-6	5)-081313D	
Lab Order:	13080639			Ta	g Number:			
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	ago, IL Collection Date: 8/13/2013 4:55:00 PM					
Lab ID:	13080639-015A				Matrix:	Soil		
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed	
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB	
Mercury		0.17	0.02		mg/Kg-dry	1	8/21/2013	
Metals by ICP/MS	;	SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG	
Antimony		ND	4.3		mg/Kg-dry	20	8/22/2013	
Cadmium		1.5	1.1		mg/Kg-dry	20	8/22/2013	
Chromium		14	2.2		mg/Kg-dry	20	8/22/2013	
Copper		36	5.4		mg/Kg-dry	20	8/22/2013	
Lead		280	1.1		mg/Kg-dry	20	8/22/2013	
Tin		ND	11	*	mg/Kg-dry	20	8/22/2013	
Zinc		200	11		mg/Kg-dry	20	8/22/2013	
Percent Moisture)	D2974	Ļ		Prep	Date: 8/20/2013	Analyst: SDA	
Percent Moisture		14.0	0.2	*	wt%	1	8/20/2013	

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August	26, 2013
					Print Date:	August	26, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-498-	01(0-6)-081313D
Lab Order:	13080639			Та	g Number:	Fine Gra	ained
Project:	Pilsen Soil Site, Pilsen, Chica	igo, IL		Colle	ction Date:	8/13/201	3 4:55:00 PM
Lab ID:	13080639-015B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/M	3	SW6020 330	(SW3 4.8	,	Prep mg/Kg-dry	Date: 8/22 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-498-01(6-	15)-081313
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/13/2013 5:00	0:00 PM
Lab ID:	13080639-016A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	3 Analyst: LB
Mercury		0.31	0.019		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/20/201:	Analyst: JG
Antimony		ND	4.4	-	mg/Kg-dry	20	8/22/2013
Cadmium		1.9	1.1		mg/Kg-dry	20	8/22/2013
Chromium		14	2.2		mg/Kg-dry	20	8/22/2013
Copper		41	5.5		mg/Kg-dry	20	8/22/2013
Lead		550	1.1		mg/Kg-dry	20	8/22/2013
Tin		14	11	*	mg/Kg-dry	20	8/22/2013
Zinc		380	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		9.9	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 2	26, 2013
					Print Date:	August 2	26, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-498-0	01(6-15)-081313
Lab Order:	13080639			Ta	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Date:	8/13/201	3 5:00:00 PM
Lab ID:	13080639-016B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/Ms	3	SW6020 640	(SW3 4.8	,	Prep mg/Kg-dry	Date: 8/22 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202-

Report Date: August 26, 2013

					Print Date	e .	
Client:	Weston Solutions			Client S	Sample ID:	PA-499-01(0-6)-081413
Lab Order:	13080639			Та	ng Number	:	
Project: Lab ID:	Pilsen Soil Site, Pilsen, C 13080639-017A	hicago, IL		Colle	ction Date Matrix	er en el società d'al prese.	:00 AM
Analyses		Result	RL	Qualifier	· Units	DF	Date Analyzed
Mercury		SW747	1A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.65 J	0.042		mg/Kg-dry	2	8/21/2013
Metals by ICP/MS	6	SW602	0 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND UD	4.5	UT	mg/Kg-dry	20	8/22/2013
Cadmium		2.5	1.1		mg/Kg-dry	20	8/22/2013
Chromium		14	2.3		mg/Kg-dry	20	8/22/2013
Copper		86	14		mg/Kg-dry	50	8/21/2013
Lead		1200	1.1		mg/Kg-dry	20	8/22/2013
Tin		26 J	11		mg/Kg-dry	20	8/22/2013
Zinc		500	11		mg/Kg-dry	20	8/22/2013
Percent Moisture		D2974			Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		14.3	0.2	*	wt%	1	8/20/2013

2) 914/13

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

- B Analyte detected in the associated Method Blank
- HT Sample received past holding time
- * Non-accredited parameter

- RL Reporting Quantitation Limit for the analysis
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

				Report Date:	August 26, 20	013
				Print Date:	August 26, 20	013
Client:	Weston Solutions		Clien	t Sample ID:	PA-499-01(0-	6)-081413
Lab Order:	13080639		r	Fag Number:	Fine Grained	
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL	Col	lection Date:	8/14/2013 9:4	5:00 AM
Lab ID:	13080639-017B			Matrix:	Soil	
Analyses		Result	RL Qualifi	er Units	DF	Date Analyzed
Metals by ICP/I	NS	SW6020 1100	5 (SW3050B)	Prep mg/Kg-dry	Date: 8/22/201 3 100	3 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20	013
					Print Date	August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-500-01(0-	6)-081413
Lab Order:	13080639			Ta	ng Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ection Date:	8/14/2013 11:	00:00 AM
Lab ID:	13080639-018A				Matrix	Soil	
Analyses		Result	RL	Qualifier	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/201	3 Analyst: LB
Mercury		0.88	0.065		mg/Kg-dry	3	8/21/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/20/201	3 Analyst: JG
Antimony		ND	4.4		mg/Kg-dry	20	8/22/2013
Cadmium		3.4	1.1		mg/Kg-dry	20	8/22/2013
Chromium		26	2.2		mg/Kg-dry	20	8/22/2013
Copper		72	5.5		mg/Kg-dry	20	8/22/2013
Lead		760	1.1		mg/Kg-dry	20	8/22/2013
Tin		27	11	*	mg/Kg-dry	20	8/22/2013
Zinc		620	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/201	3 Analyst: SDA
Percent Moisture		13.4	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	port Date:	August 2	6, 2013
				F	Print Date:	August 2	6, 2013
Client:	Weston Solutions			Client Sa	ample ID:	PA-500-0	01(0-6)-081413
Lab Order:	13080639			Та	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chic	ago, IL		Collec	tion Date:	8/14/2013	3 11:00:00 AM
Lab ID:	13080639-018B				Matrix:	Soil	
Analyses		Result	RL Q	Qualifier	Units	DF	Date Analyzed
Metals by ICP/M Lead	3	SW602 1300) (SW305 4.8	,	Prep I mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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				R	eport Date:	August 26, 20)13
					Print Date:	August 26, 20)13
Client:	Weston Solutions			Client S	Sample ID:	PA-500-01(6-2	24)-081413
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/14/2013 11:0	05:00 AM
Lab ID:	13080639-019A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		1.7	0.2		mg/Kg-dry	10	8/21/2013
Metals by ICP/MS		SW602	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	3.9		mg/Kg-dry	20	8/22/2013
Cadmium		3.1	0.97		mg/Kg-dry	20	8/22/2013
Chromium		22	1.9		mg/Kg-dry	20	8/22/2013
Copper		88	4.8		mg/Kg-dry	20	8/22/2013
Lead		930	0.97		mg/Kg-dry	20	8/22/2013
Tin		28	9.7	*	mg/Kg-dry	20	8/22/2013
Zinc		690	9.7		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	Ļ		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		12.9	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 2	013
					Print Date:	August 26, 2	013
Client:	Weston Solutions			Client S	Sample ID:	PA-500-01(6	-24)-081413
Lab Order:	13080639			Ta	g Number:	Fine Grained	l
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL		Colle	ction Date:	8/14/2013 11	:05:00 AM
Lab ID:	13080639-019B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Metals by ICP/N Lead	IS	SW6020 1400	(SW3 5	050B)	Prep mg/Kg-dry	Date: 8/22/201 100	3 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20	013
					Print Date:	August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-501-01(0-6	5)-081413
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/14/2013 12:0	00:00 PM
Lab ID:	13080639-020A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.081	0.026		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	;	SW60	20 (SW3	050B)	Prep	Date: 8/20/2013	Analyst: JG
Antimony		ND	5.2	-	mg/Kg-dry	20	8/22/2013
Cadmium		1.4	1.3		mg/Kg-dry	20	8/22/2013
Chromium		22	2.6		mg/Kg-dry	20	8/22/2013
Copper		28	6.5		mg/Kg-dry	20	8/22/2013
Lead		66	1.3		mg/Kg-dry	20	8/22/2013
Tin		ND	13	*	mg/Kg-dry	20	8/22/2013
Zinc		150	13		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		30.7	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August	26, 2013
]	Print Date:	August	26, 2013
Client:	Weston Solutions			Client S	ample ID:	PA-501-	01(0-6)-081413
Lab Order:	13080639			Та	g Number:	Fine Gra	ained
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Date:	8/14/201	3 12:00:00 PM
Lab ID:	13080639-020B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	S	SW602 66	0 (SW3 6.5	,	Prep mg/Kg-dry	Date: 8/22 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20	013
					Print Date	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-502-01(0-6	5)-081413
Lab Order:	13080639			Та	g Number:	:	
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	: 8/14/2013 2:00):00 PM
Lab ID:	13080639-021A				Matrix	Soil	
Analyses		Result	RL	Qualifier	[.] Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		1	0.22		mg/Kg-dry	10	8/21/2013
Metals by ICP/MS	6	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.8		mg/Kg-dry	20	8/22/2013
Cadmium		7.3	1.2		mg/Kg-dry	20	8/22/2013
Chromium		60	2.4		mg/Kg-dry	20	8/22/2013
Copper		300	6		mg/Kg-dry	20	8/22/2013
Lead		780	1.2		mg/Kg-dry	20	8/22/2013
Tin		20	12	*	mg/Kg-dry	20	8/22/2013
Zinc		610	12		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	L		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		23.1	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August 26, 2	2013
				Print Date:	August 26, 2	2013
Client:	Weston Solutions		Clier	t Sample ID:	PA-502-01(0	-6)-081413
Lab Order:	13080639			Tag Number:	Fine Grained	1
Project:	Pilsen Soil Site, Pilsen, Chic	ago, IL	Co	llection Date:	8/14/2013 2:0	00:00 PM
Lab ID:	13080639-021B			Matrix:	Soil	
Analyses		Result	RL Qualif	ier Units	DF	Date Analyzed
Metals by ICP/N Lead	IS	SW602 620	0 (SW3050B) 5.5	Prep mg/Kg-dry	Date: 8/22/201 100	3 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20	13
					Print Date	: August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-502-01(6-2	24)-081413
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	cago, IL Collection Date: 8/14/2013 2:05:00 PM				
Lab ID:	13080639-022A				Matrix	Soil	
Analyses		Result	RL	Qualifier	[.] Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		1.2	0.25		mg/Kg-dry	10	8/21/2013
Metals by ICP/MS	;	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.5		mg/Kg-dry	20	8/22/2013
Cadmium		4.9	1.1		mg/Kg-dry	20	8/22/2013
Chromium		38	2.3		mg/Kg-dry	20	8/22/2013
Copper		91	5.6		mg/Kg-dry	20	8/22/2013
Lead		580	1.1		mg/Kg-dry	20	8/22/2013
Tin		26	11	*	mg/Kg-dry	20	8/22/2013
Zinc		490	11		mg/Kg-dry	20	8/22/2013
Percent Moisture		D2974	Ļ		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		22.1	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	port Date:	August 2	26, 2013
				I	Print Date:	August 2	26, 2013
Client:	Weston Solutions		C	lient S	ample ID:	PA-502-0	01(6-24)-081413
Lab Order:	13080639			Та	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Collec	ction Date:	8/14/2013	3 2:05:00 PM
Lab ID:	13080639-022B				Matrix:	Soil	
Analyses		Result	RL Qu	alifier	Units	DF	Date Analyzed
Metals by ICP/M Lead	S	SW602 770	0 (SW3050) 5.7	,	Prep l mg/Kg-dry	Date: 8/22/ 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-503-01(0-0	5)-081413
Lab Order:	13080639			Ta	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	Collection Date: 8/14/2013 3:15:00 PM				
Lab ID:	13080639-023A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.64	0.024		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.7	-	mg/Kg-dry	20	8/22/2013
Cadmium		6.1	1.2		mg/Kg-dry	20	8/22/2013
Chromium		25	2.4		mg/Kg-dry	20	8/22/2013
Copper		130	5.9		mg/Kg-dry	20	8/22/2013
Lead		1400	1.2		mg/Kg-dry	20	8/22/2013
Tin		21	12	*	mg/Kg-dry	20	8/22/2013
Zinc		830	12		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		17.1	0.2	*	wt%	1	8/20/2013

ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
HT - Sample received past holding time	E - Value above quantitation range
* - Non-accredited parameter	H - Holding time exceeded
	J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

				Re	port Date:	August 2	26, 2013
				I	Print Date:	August 2	26, 2013
Client:	Weston Solutions			Client S	ample ID:	PA-503-0)1(0-6)-081413
Lab Order:	13080639			Та	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chic	ago, IL		Collec	ction Date:	8/14/2013	3 3:15:00 PM
Lab ID:	13080639-023B				Matrix:	Soil	
Analyses		Result	RL (Qualifier	Units	DF	Date Analyzed
Metals by ICP/M	3	SW602 1700	0 (SW30 5.8	,	Prep I mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20	013
					Print Date	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-503-01(6-	24)-081413
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	co, IL Collection Date: 8/14/2013 3:20:00 PM				
Lab ID:	13080639-024A				Matrix	: Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	3 Analyst: LB
Mercury		0.74	0.062		mg/Kg-dry	3	8/21/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/21/201	3 Analyst: JG
Antimony		ND	4.1		mg/Kg-dry	20	8/22/2013
Cadmium		5.1	1		mg/Kg-dry	20	8/22/2013
Chromium		23	2.1		mg/Kg-dry	20	8/22/2013
Copper		140	5.2		mg/Kg-dry	20	8/22/2013
Lead		840	1		mg/Kg-dry	20	8/22/2013
Tin		110	10	*	mg/Kg-dry	20	8/22/2013
Zinc		800	10		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	3 Analyst: SDA
Percent Moisture		12.9	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August	26, 2013
				Print Date	: August	26, 2013
Client:	Weston Solutions		Clien	t Sample ID:	PA-503-	01(6-24)-081413
Lab Order:	13080639		,	Fag Number:	Fine Gra	ained
Project:	Pilsen Soil Site, Pilsen, Chio	cago, IL	Co	llection Date:	8/14/201	3 3:20:00 PM
Lab ID:	13080639-024B			Matrix	: Soil	
Analyses		Result	RL Qualifi	er Units	DF	Date Analyzed
Metals by ICP/M	S	SW602 1200	20 (SW3050B) 4.8	Prep mg/Kg-dry	Date: 8/22	2/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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				Re	eport Date:	August 26, 20	13
					Print Date	August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-504-01(0-6	5)-081513
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/15/2013 9:15	5:00 AM
Lab ID:	13080639-025A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.19	0.025		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.8		mg/Kg-dry	20	8/22/2013
Cadmium		1.8	1.2		mg/Kg-dry	20	8/22/2013
Chromium		21	2.4		mg/Kg-dry	20	8/22/2013
Copper		41	6.1		mg/Kg-dry	20	8/22/2013
Lead		390	1.2		mg/Kg-dry	20	8/22/2013
Tin		26	12	*	mg/Kg-dry	20	8/22/2013
Zinc		240	12		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		20.2	0.2	*	wt%	1	8/20/2013

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			Rej	port Date:	August	26, 2013
			P	Print Date:	August	26, 2013
Weston Solutions			Client Sa	ample ID:	PA-504-	01(0-6)-081513
13080639			Тар	g Number:	Fine Gra	ined
Pilsen Soil Site, Pilsen, Chica	go, IL		Collec	tion Date:	8/15/201	3 9:15:00 AM
13080639-025B				Matrix:	Soil	
	Result	RL (Qualifier	Units	DF	Date Analyzed
S		•	,	•		/2013 Analyst: JG 8/22/2013
	13080639 Pilsen Soil Site, Pilsen, Chica	13080639 Pilsen Soil Site, Pilsen, Chicago, IL 13080639-025B Result	13080639 Pilsen Soil Site, Pilsen, Chicago, IL 13080639-025B Result RL (S SW6020 (SW305	Weston Solutions Client Sa 13080639 Tag Pilsen Soil Site, Pilsen, Chicago, IL Collec 13080639-025B Result RL Qualifier S SW6020 (SW3050B)	Print Date: Weston Solutions Client Sample ID: 13080639 Tag Number: Pilsen Soil Site, Pilsen, Chicago, IL Collection Date: 13080639-025B Matrix: Result RL Qualifier Units S SW6020 (SW3050B) Prep	13080639Tag Number:Fine GraPilsen Soil Site, Pilsen, Chicago, ILCollection Date:8/15/20113080639-025BMatrix:SoilResultRLQualifierUnitsDFSSW6020 (SW3050B)Prep Date:8/22

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-505-01(0-0	5)-081513
Lab Order:	13080639			Тε	ng Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/15/2013 10:2	25:00 AM
Lab ID:	13080639-026A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	r Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	B Analyst: LB
Mercury		0.97	0.077		mg/Kg-dry	3	8/21/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	5.3		mg/Kg-dry	20	8/22/2013
Cadmium		5.5	1.3		mg/Kg-dry	20	8/22/2013
Chromium		53	2.6		mg/Kg-dry	20	8/22/2013
Copper		170	6.6		mg/Kg-dry	20	8/22/2013
Lead		1300	1.3		mg/Kg-dry	20	8/22/2013
Tin		33	13	*	mg/Kg-dry	20	8/22/2013
Zinc		1300	13		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D297	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		25.4	0.2	*	wt%	1	8/20/2013

ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
HT - Sample received past holding time	E - Value above quantitation range
* - Non-accredited parameter	H - Holding time exceeded
	J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

				Report Date:	August 2	26, 2013
				Print Date	: August 2	26, 2013
Client:	Weston Solutions		Clie	nt Sample ID:	PA-505-0)1(0-6)-081513
Lab Order:	13080639			Tag Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL	С	ollection Date:	8/15/2013	3 10:25:00 AM
Lab ID:	13080639-026B			Matrix	: Soil	
Analyses		Result	RL Quali	fier Units	DF	Date Analyzed
Metals by ICP/M Lead	IS	SW6020 1900) (SW3050B) 5.1	Prep mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20	013
					Print Date:	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-505-01(0-0	5)-081513D
Lab Order:	13080639			Ta	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/15/2013 10:3	30:00 AM
Lab ID:	13080639-027A				Matrix	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.87	0.027		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.5	-	mg/Kg-dry	20	8/22/2013
Cadmium		6	1.1		mg/Kg-dry	20	8/22/2013
Chromium		35	2.2		mg/Kg-dry	20	8/22/2013
Copper		180	5.6		mg/Kg-dry	20	8/22/2013
Lead		1400	1.1		mg/Kg-dry	20	8/22/2013
Tin		30	11	*	mg/Kg-dry	20	8/22/2013
Zinc		1300	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		24.9	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20	013
_					Print Date:	August 26, 20	013
Client:	Weston Solutions			Client	Sample ID:	PA-505-01(0-	6)-081513D
Lab Order:	13080639			Tε	ng Number:	Fine Grained	
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Date:	8/15/2013 10:	30:00 AM
Lab ID:	13080639-027B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	r Units	DF	Date Analyzed
Metals by ICP/MS	3	SW602(1600) (SW3 5.3	050B)	Prep mg/Kg-dry	Date: 8/22/201 3 100	3 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date	: August 26, 20)13
Client:	Weston Solutions			Client S	Sample ID:	PA-506-01(0-0	6)-081513
Lab Order:	13080639			Ta	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/15/2013 11:4	40:00 AM
Lab ID:	13080639-028A				Matrix	: Soil	
Analyses		Result	RL	Qualifier	· Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	B Analyst: LB
Mercury		0.99	0.063		mg/Kg-dry	3	8/21/2013
Metals by ICP/MS	6	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.6	-	mg/Kg-dry	20	8/22/2013
Cadmium		4.1	1.1		mg/Kg-dry	20	8/22/2013
Chromium		28	2.3		mg/Kg-dry	20	8/22/2013
Copper		94	5.7		mg/Kg-dry	20	8/22/2013
Lead		940	1.1		mg/Kg-dry	20	8/22/2013
Tin		17	11	*	mg/Kg-dry	20	8/22/2013
Zinc		780	11		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		12.7	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August	26, 2013
					Print Date:	August	26, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-506-	01(0-6)-081513
Lab Order:	13080639			Та	g Number:	Fine Gra	ained
Project:	Pilsen Soil Site, Pilsen, Chic	ago, IL		Colle	ction Date:	8/15/201	3 11:40:00 AM
Lab ID:	13080639-028B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/M	6	SW602 (1400) (SW3 4.8	050B)	Prep mg/Kg-dry	Date: 8/22 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				R	eport Date:	August 26, 20)13
					Print Date:	August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-507-01(0-0	6)-081513
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/15/2013 1:30):00 PM
Lab ID:	13080639-029A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	B Analyst: LB
Mercury		0.25	0.02		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	;	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4		mg/Kg-dry	20	8/22/2013
Cadmium		3.2	0.99		mg/Kg-dry	20	8/22/2013
Chromium		15	2		mg/Kg-dry	20	8/22/2013
Copper		48	4.9		mg/Kg-dry	20	8/22/2013
Lead		270	0.99		mg/Kg-dry	20	8/22/2013
Tin		ND	9.9	*	mg/Kg-dry	20	8/22/2013
Zinc		280	9.9		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	Ļ		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		11.3	0.2	*	wt%	1	8/20/2013

ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
HT - Sample received past holding time	E - Value above quantitation range
* - Non-accredited parameter	H - Holding time exceeded
	J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

				Re	eport Date:	August 2	26, 2013
]	Print Date:	August 2	26, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-507-0	01(0-6)-081513
Lab Order:	13080639			Та	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL		Colle	ction Date:	8/15/2013	3 1:30:00 PM
Lab ID:	13080639-029B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	S	SW6020 630	(SW3 4.7	,	Prep mg/Kg-dry	Date: 8/22 / 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20	13
]	Print Date:	: August 26, 20	13
Client:	Weston Solutions			Client S	ample ID:	PA-508-01(0-6)-081513
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/15/2013 2:45	:00 PM
Lab ID:	13080639-030A				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.48	0.02		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.4		mg/Kg-dry	20	8/22/2013
Cadmium		2.7	1.1		mg/Kg-dry	20	8/22/2013
Chromium		26	2.2		mg/Kg-dry	20	8/22/2013
Copper		52	5.5		mg/Kg-dry	20	8/22/2013
Lead		580	1.1		mg/Kg-dry	20	8/22/2013
Tin		ND	11	*	mg/Kg-dry	20	8/22/2013
Zinc		400	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	Ļ		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		15.2	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	port Date:	August 2	6, 2013
				I	Print Date:	August 2	26, 2013
Client:	Weston Solutions			Client S	ample ID:	PA-508-0)1(0-6)-081513
Lab Order:	13080639			Ta	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Collec	ction Date:	8/15/2013	3 2:45:00 PM
Lab ID:	13080639-030B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	IS	SW602 290	0 (SW30 4.8	,	Prep l mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20)13
					Print Date	: August 26, 20)13
Client:	Weston Solutions			Client S	Sample ID:	PA-508-01(6-2	24)-081513
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	go, IL Collection Date: 8/15/2013 2:50:00 PM				
Lab ID:	13080639-031A				Matrix	: Soil	
Analyses		Result	RL	Qualifier	[.] Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	B Analyst: LB
Mercury		0.34	0.023		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.1		mg/Kg-dry	20	8/22/2013
Cadmium		1.8	1		mg/Kg-dry	20	8/22/2013
Chromium		9	2.1		mg/Kg-dry	20	8/22/2013
Copper		25	5.2		mg/Kg-dry	20	8/22/2013
Lead		140	1		mg/Kg-dry	20	8/22/2013
Tin		12	10	*	mg/Kg-dry	20	8/22/2013
Zinc		210	10		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		19.2	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August	26, 2013
				Print Date:	August 2	26, 2013
Client:	Weston Solutions		Clien	t Sample ID:	PA-508-	01(6-24)-081513
Lab Order:	13080639		r	Tag Number:	Fine Gra	ained
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL	Col	lection Date:	8/15/201	3 2:50:00 PM
Lab ID:	13080639-031B			Matrix:	Soil	
Analyses		Result	RL Qualifi	er Units	DF	Date Analyzed
Metals by ICP/M Lead	S	SW602 110	0 (SW3050B) 4.4	Prep mg/Kg-dry	Date: 8/22 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis			
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits			
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits			
	HT - Sample received past holding time	E - Value above quantitation range			
	* - Non-accredited parameter	H - Holding time exceeded			

				R	eport Date:	August 26, 20	13
					Print Date	: August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-509-01(0-6	5)-081513
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	ago, IL Collection Date: 8/15/2013 4:00:00 PM				
Lab ID:	13080639-032A				Matrix	Soil	
Analyses		Result	RL	Qualifier	· Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		1.2	0.076		mg/Kg-dry	3	8/21/2013
Metals by ICP/MS	6	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	5		mg/Kg-dry	20	8/22/2013
Cadmium		4.7	1.2		mg/Kg-dry	20	8/22/2013
Chromium		40	2.5		mg/Kg-dry	20	8/22/2013
Copper		120	6.2		mg/Kg-dry	20	8/22/2013
Lead		1400	1.2		mg/Kg-dry	20	8/22/2013
Tin		53	12	*	mg/Kg-dry	20	8/22/2013
Zinc		830	12		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D297	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		21.3	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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				Re	eport Date:	August 2	6, 2013
]	Print Date:	August 2	6, 2013
Client:	Weston Solutions			Client S	Sample ID:	PA-509-0	01(0-6)-081513
Lab Order:	13080639			Та	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL		Colle	ction Date:	8/15/2013	3 4:00:00 PM
Lab ID:	13080639-032B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	3	SW6020 1400	(SW3 4.9	,	Prep mg/Kg-dry	Date: 8/22/ 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20	13
]	Print Date	: August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-510-01(0-6	5)-081513
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	hicago, IL	o, IL Collection Date: 8/15/2013 4:50:00 PM				
Lab ID:	13080639-033A				Matrix	Soil	
Analyses		Result	RL	Qualifier	[.] Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.99	0.07		mg/Kg-dry	3	8/21/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.3		mg/Kg-dry	20	8/22/2013
Cadmium		4.1	1.1		mg/Kg-dry	20	8/22/2013
Chromium		28	2.1		mg/Kg-dry	20	8/22/2013
Copper		100	5.4		mg/Kg-dry	20	8/22/2013
Lead		1700	1.1		mg/Kg-dry	20	8/22/2013
Tin		25	11	*	mg/Kg-dry	20	8/22/2013
Zinc		790	11		mg/Kg-dry	20	8/22/2013
Percent Moisture	9	D2974	ļ		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		16.0	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August 2	6, 2013
				Print Date	: August 2	6, 2013
Client:	Weston Solutions		Clie	nt Sample ID:	PA-510-0	1(0-6)-081513
Lab Order:	13080639			Tag Number:	Fine Grai	ned
Project:	Pilsen Soil Site, Pilsen, Chic	ago, IL	С	ollection Date:	8/15/2013	4:50:00 PM
Lab ID:	13080639-033B			Matrix	Soil	
Analyses		Result	RL Quali	fier Units	DF	Date Analyzed
Metals by ICP/M	S	SW602 2200	0 (SW3050B) 4.8	Prep mg/Kg-dry	Date: 8/22/ 2	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20)13
]	Print Date	: August 26, 20)13
Client:	Weston Solutions			Client S	Sample ID:	PA-511-01(0-0	6)-081613
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	icago, IL Collection Date: 8/16/2013 8:30:00 AM				
Lab ID:	13080639-034A				Matrix	: Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	B Analyst: LB
Mercury		0.2	0.021		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	6	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.4		mg/Kg-dry	20	8/22/2013
Cadmium		1.7	1.1		mg/Kg-dry	20	8/22/2013
Chromium		21	2.2		mg/Kg-dry	20	8/22/2013
Copper		40	5.6		mg/Kg-dry	20	8/22/2013
Lead		210	1.1		mg/Kg-dry	20	8/22/2013
Tin		ND	11	*	mg/Kg-dry	20	8/22/2013
Zinc		170	11		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		15.1	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Repo	ort Date:	August 26, 2	2013
				Pr	int Date:	August 26, 2	2013
Client:	Weston Solutions		Cli	ient Sar	nple ID:	PA-511-01(0)-6)-081613
Lab Order:	13080639			Tag I	Number:	Fine Grained	d
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL	(Collecti	on Date:	8/16/2013 8:	30:00 AM
Lab ID:	13080639-034B				Matrix:	Soil	
Analyses		Result	RL Qua	lifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	IS	SW602 370) (SW3050B 4.6	,	Prep g/Kg-dry	Date: 8/22/20 1 100	13 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20	13
]	Print Date	: August 26, 20	13
Client:	Weston Solutions			Client S	ample ID:	PA-512-01(0-6	5)-081613
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	icago, IL Collection Date: 8/16/2013 9:20:00 AM					
Lab ID:	13080639-035A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.27	0.02		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	6	SW602	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.7		mg/Kg-dry	20	8/22/2013
Cadmium		1.7	1.2		mg/Kg-dry	20	8/22/2013
Chromium		19	2.3		mg/Kg-dry	20	8/22/2013
Copper		37	5.9		mg/Kg-dry	20	8/22/2013
Lead		320	1.2		mg/Kg-dry	20	8/22/2013
Tin		ND	12	*	mg/Kg-dry	20	8/22/2013
Zinc		230	12		mg/Kg-dry	20	8/22/2013
Percent Moisture		D2974			Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		16.2	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report D	ate: August	26, 2013
				Print D	ate: August	26, 2013
Client:	Weston Solutions		Cli	ent Sample	ID: PA-512-	-01(0-6)-081613
Lab Order:	13080639			Tag Num	ber: Fine Gra	ained
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL	(Collection D	ate: 8/16/201	13 9:20:00 AM
Lab ID:	13080639-035B			Ma	trix: Soil	
Analyses		Result	RL Qua	ifier Unit	s DF	Date Analyzed
Metals by ICP/N Lead	IS	SW6020 520	(SW3050B) 4.6	P mg/Kg-	rep Date: 8/22 dry 100	2/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20	13
				-	Print Date	: August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-513-01(0-6)-081613
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Thicago, IL		Colle	ction Date:	8/16/2013 9:50	:00 AM
Lab ID:	13080639-036A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.2	0.022		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	6	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.2		mg/Kg-dry	20	8/22/2013
Cadmium		1.4	1		mg/Kg-dry	20	8/22/2013
Chromium		31	2.1		mg/Kg-dry	20	8/22/2013
Copper		45	5.2		mg/Kg-dry	20	8/22/2013
Lead		170	1		mg/Kg-dry	20	8/22/2013
Tin		ND	10	*	mg/Kg-dry	20	8/22/2013
Zinc		200	10		mg/Kg-dry	20	8/22/2013
Percent Moisture	9	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		19.7	0.2	*	wt%	1	8/20/2013

ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
HT - Sample received past holding time	E - Value above quantitation range
* - Non-accredited parameter	H - Holding time exceeded
	J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

				Re	port Date:	August 2	26, 2013
				I	Print Date:	August 2	26, 2013
Client:	Weston Solutions			Client S	ample ID:	PA-513-	01(0-6)-081613
Lab Order:	13080639			Таз	g Number:	Fine Gra	ined
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL		Collec	tion Date:	8/16/201	3 9:50:00 AM
Lab ID:	13080639-036B				Matrix:	Soil	
Analyses		Result	RL Q	Qualifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	S	SW6020 230	(SW305 4.7	,	Prep l mg/Kg-dry	Date: 8/22 100	/2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis				
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits				
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits				
	HT - Sample received past holding time	E - Value above quantitation range				
	* - Non-accredited parameter	H - Holding time exceeded				

				R	eport Date:	August 26, 20	13
					Print Date:	: August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-513-01(0-6)-081613D
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/16/2013 9:55	::00 AM
Lab ID:	13080639-037A				Matrix	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.28	0.025		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.2		mg/Kg-dry	20	8/22/2013
Cadmium		1.3	1		mg/Kg-dry	20	8/22/2013
Chromium		23	2.1		mg/Kg-dry	20	8/22/2013
Copper		42	5.2		mg/Kg-dry	20	8/22/2013
Lead		140	1		mg/Kg-dry	20	8/22/2013
Tin		ND	10	*	mg/Kg-dry	20	8/22/2013
Zinc		200	10		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		20.6	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank		R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

-

				R	eport Date:	August 26, 2	013
					Print Date:	August 26, 2	013
Client:	Weston Solutions			Client S	Sample ID:	PA-513-01(0-	-6)-081613D
Lab Order:	13080639			Ta	g Number:	Fine Grained	
Project:	Pilsen Soil Site, Pilsen, Chica	igo, IL		Colle	ction Date:	8/16/2013 9:5	5:00 AM
Lab ID:	13080639-037B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/M	8	SW6020	•	6050B)	•	Date: 8/22/201	2
Lead		210	4.8		mg/Kg-dry	100	8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis			
Qualifiers: J - Analyte detected below quantitation limits		S - Spike Recovery outside accepted recovery limits			
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits			
	HT - Sample received past holding time	E - Value above quantitation range			
	* - Non-accredited parameter	H - Holding time exceeded			

				R	eport Date:	August 26, 20	013
					Print Date	: August 26, 20	013
Client:	Weston Solutions			Client S	Sample ID:	PA-514-01(0-6	5)-081613
Lab Order:	13080639			Ta	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/16/2013 11:2	25:00 AM
Lab ID:	13080639-038A				Matrix	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.28	0.024		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	6	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.3		mg/Kg-dry	20	8/22/2013
Cadmium		2.1	1.1		mg/Kg-dry	20	8/22/2013
Chromium		23	2.1		mg/Kg-dry	20	8/22/2013
Copper		59	5.4		mg/Kg-dry	20	8/22/2013
Lead		410	1.1		mg/Kg-dry	20	8/22/2013
Tin		ND	11	*	mg/Kg-dry	20	8/22/2013
Zinc		370	11		mg/Kg-dry	20	8/22/2013
Percent Moisture)	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		18.2	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Report Date:	August 26	5, 2013
				Print Date	: August 26	5, 2013
Client:	Weston Solutions		Clie	ent Sample ID:	PA-514-01	1(0-6)-081613
Lab Order:	13080639			Tag Number:	Fine Grain	ned
Project:	Pilsen Soil Site, Pilsen, Chicag	go, IL	C	ollection Date	: 8/16/2013	11:25:00 AM
Lab ID:	13080639-038B			Matrix	: Soil	
Analyses		Result	RL Qual	ifier Units	DF	Date Analyzed
Metals by ICP/I Lead	MS	SW6020 430	(SW3050B) 5	Prep mg/Kg-dry	Date: 8/22/2 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

				Re	eport Date:	August 26, 20	13
					Print Date	: August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-514-01(6-2	24)-081613
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL	go, IL Collection Date: 8/16/2013 11:30:00 AM				
Lab ID:	13080639-039A				Matrix	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.63	0.019		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS		SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.7	-	mg/Kg-dry	20	8/22/2013
Cadmium		3.7	1.2		mg/Kg-dry	20	8/22/2013
Chromium		24	2.3		mg/Kg-dry	20	8/22/2013
Copper		92	5.9		mg/Kg-dry	20	8/22/2013
Lead		760	1.2		mg/Kg-dry	20	8/22/2013
Tin		31	12	*	mg/Kg-dry	20	8/22/2013
Zinc		1700	12		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		17.9	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank		R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL3000001; AIHA 101160; NVLAP LabCode 101202-

				Report Date:	August 26	5, 2013
				Print Date	: August 26	5, 2013
Client:	Weston Solutions		Clie	ent Sample ID:	PA-514-0	1(6-24)-081613
Lab Order:	13080639			Tag Number:	Fine Grain	ned
Project:	Pilsen Soil Site, Pilsen, Chic	ago, IL	C	ollection Date:	8/16/2013	11:30:00 AM
Lab ID:	13080639-039B			Matrix	Soil	
Analyses		Result	RL Qual	fier Units	DF	Date Analyzed
Metals by ICP/M	S	SW602 830	0 (SW3050B) 4.7	Prep mg/Kg-dry	Date: 8/22/2 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202-

						Print Date	: August 26, 20	013
Client:	Weston Solutions				Client S	Sample ID:	PA-515-01(0-6	6)-081613
Lab Order:	13080639				Ta	g Number	:	
Project:	Pilsen Soil Site, Pilsen, C	hicago, IL			Colle	ction Date	: 8/16/2013 1:30):00 PM
Lab ID:	13080639-040A					Matrix	: Soil	
Analyses		Result		RL	Qualifier	Units	DF	Date Analyzed
Mercury		SW	7471	A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.89	J	0.096		mg/Kg-dry	5	8/21/2013
Metals by ICP/MS		SW	6020	(SW3	050B)	Prep	Date: 8/23/2013	Analyst: JG
Antimony		9.2	t	4.8		mg/Kg-dry	20	8/23/2013
Cadmium		7.4		1.2		mg/Kg-dry	20	8/23/2013
Chromium		22		2.4		mg/Kg-dry	20	8/23/2013
Copper		140		6		mg/Kg-dry	20	8/23/2013
Lead		1600	-	1.2		mg/Kg-dry	20	8/23/2013
Tin		29 J	1	12		mg/Kg-dry	20	8/23/2013
Zinc		1100		12		mg/Kg-dry	20	8/23/2013
Percent Moisture		D29	974			Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		19.1		0.2		wt%	1	8/20/2013

22 9/4/13

Report Date: August 26, 2013

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank HT - Sample received past holding time

* - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis S - Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

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				Report Date:	August 2	5, 2013
				Print Date:	August 20	5, 2013
Client:	Weston Solutions		Clien	t Sample ID:	PA-515-0	1(0-6)-081613
Lab Order:	13080639		,	Tag Number:	Fine Grai	ned
Project:	Pilsen Soil Site, Pilsen, Chica	ago, IL	Со	llection Date:	8/16/2013	1:30:00 PM
Lab ID:	13080639-040B			Matrix:	Soil	
Analyses		Result	RL Qualif	ier Units	DF	Date Analyzed
Metals by ICP/M Lead	8	SW602 1600) (SW3050B) 4.9	Prep mg/Kg-dry	Date: 8/22/2 100	2013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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				R	eport Date:	August 26, 20	13
					Print Date	: August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-516-01(0-0	5)-081613
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/16/2013 2:50):00 PM
Lab ID:	13080639-041A				Matrix	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.31	0.026		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	;	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	4.8		mg/Kg-dry	20	8/22/2013
Cadmium		5.3	1.2		mg/Kg-dry	20	8/22/2013
Chromium		32	2.4		mg/Kg-dry	20	8/22/2013
Copper		70	6		mg/Kg-dry	20	8/22/2013
Lead		520	1.2		mg/Kg-dry	20	8/22/2013
Tin		ND	12	*	mg/Kg-dry	20	8/22/2013
Zinc		500	12		mg/Kg-dry	20	8/22/2013
Percent Moisture		D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		23.3	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL3000001; AIHA 101160; NVLAP LabCode 101202-

				Re	port Date:	August 26	, 2013
				I	Print Date:	August 26	, 2013
Client:	Weston Solutions		(Client S	ample ID:	PA-516-01	(0-6)-081613
Lab Order:	13080639			Та	g Number:	Fine Grain	ed
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL		Collec	ction Date:	8/16/2013	2:50:00 PM
Lab ID:	13080639-041B				Matrix:	Soil	
Analyses		Result	RL Q	ualifier	Units	DF	Date Analyzed
Metals by ICP/N Lead	IS	SW602 450) (SW3050 4.9	,	Prep mg/Kg-dry	Date: 8/22/2 100	013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202-

				R	eport Date:	August 26, 20	13
					Print Date:	: August 26, 20	13
Client:	Weston Solutions			Client S	Sample ID:	PA-516-01(0-6)-081613D
Lab Order:	13080639			Та	g Number:		
Project:	Pilsen Soil Site, Pilsen, C	Chicago, IL		Colle	ction Date:	8/16/2013 2:55	:00 PM
Lab ID:	13080639-042A				Matrix	Soil	
Analyses		Result	RL	Qualifier	• Units	DF	Date Analyzed
Mercury		SW74	71A		Prep	Date: 8/20/2013	Analyst: LB
Mercury		0.62	0.022		mg/Kg-dry	1	8/21/2013
Metals by ICP/MS	i	SW60	20 (SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG
Antimony		ND	5.1	-	mg/Kg-dry	20	8/22/2013
Cadmium		4.2	1.3		mg/Kg-dry	20	8/22/2013
Chromium		33	2.5		mg/Kg-dry	20	8/22/2013
Copper		67	6.3		mg/Kg-dry	20	8/22/2013
Lead		560	1.3		mg/Kg-dry	20	8/22/2013
Tin		ND	13	*	mg/Kg-dry	20	8/22/2013
Zinc		470	13		mg/Kg-dry	20	8/22/2013
Percent Moisture	•	D2974	4		Prep	Date: 8/20/2013	Analyst: SDA
Percent Moisture		24.0	0.2	*	wt%	1	8/20/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

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2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202-

				Re	port Date:	August 26,	2013
				I	Print Date:	August 26,	2013
Client:	Weston Solutions			Client S	ample ID:	PA-516-01((0-6)-081613D
Lab Order:	13080639			Та	g Number:	Fine Graine	ed
Project:	Pilsen Soil Site, Pilsen, Chicag	o, IL		Collec	ction Date:	8/16/2013 2	:55:00 PM
Lab ID:	13080639-042B				Matrix:	Soil	
Analyses		Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/I Lead	MS	SW6020 470) (SW30 5	,	Prep l mg/Kg-dry	Date: 8/22/20 100	013 Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP 1L300001; AIHA 101160; NVLAP LabCode 101202-

						Print Date	: August 26, 20	13				
Client:	Weston Solutions				Client	Sample ID:	PA-516-01(6-1	8)-081613				
Lab Order:	13080639				Та	ng Number						
Project: Lab ID:	Pilsen Soil Site, Pilsen, C 13080639-043A	hicago, IL			Colle		: 8/16/2013 3:00 : Soil	:00:00 PM				
Analyses		Resul	t	RL	Qualifier	Units	DF	Date Analyzed				
Aercury		SI	N7471	A		Prep	Date: 8/20/2013	Analyst: LB				
Mercury		0.5		0.022		mg/Kg-dry	1	8/21/2013				
letals by ICP/MS	i i i i i i i i i i i i i i i i i i i			(SW3	050B)	Prep	Date: 8/21/2013	Analyst: JG				
Antimony		ND	00	4.8		mg/Kg-dry	20	8/22/2013				
Cadmium		3.2		1.2		mg/Kg-dry	20	8/22/2013				
Chromium		24		2.4		mg/Kg-dry	20	8/22/2013				
Copper		64		6		mg/Kg-dry	20	8/22/2013				
Lead		550		1.2		mg/Kg-dry	20	8/22/2013				
Tin		ND		12	*	mg/Kg-dry	20	8/22/2013				
Zinc		610		12		mg/Kg-dry	20	8/22/2013				
ercent Moisture	e	D2	974			Prep	Date: 8/20/2013	Analyst: SDA				
Percent Moisture		20.9		0.2		wt%	1	8/20/2013				

1 × 9 14/13

Report Date: August 26, 2013

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank

HT - Sample received past holding time * - Non-accredited parameter

- RL Reporting / Quantitation Limit for the analysis S - Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- H Holding time exceeded

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766 Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Accreditation Numbers: IEPA ELAP 100445; ORELAP IL3000001; AIHA 101160; NVLAP LabCode 101202-

]	Report Date:	August 26, 20	13
				Print Date:	August 26, 20	13
Client:	Weston Solutions		Client	t Sample ID:	PA-516-01(6-1	8)-081613
Lab Order:	13080639		1	Tag Number:	Fine Grained	
Project:	Pilsen Soil Site, Pilsen, Chica	go, IL	Col	lection Date:	8/16/2013 3:00	:00 PM
Lab ID:	13080639-043B			Matrix:	Soil	
Analyses		Result	RL Qualifi	er Units	DF	Date Analyzed
Metals by ICP/N Lead	IS	SW6020 740	(SW3050B) 5	Prep I mg/Kg-dry	Date: 8/22/2013 100	Analyst: JG 8/22/2013

	ND - Not Detected at the Reporting Limit	RL - Reporting / Quantitation Limit for the analysis
Qualifiers:	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	HT - Sample received past holding time	E - Value above quantitation range
	* - Non-accredited parameter	H - Holding time exceeded



STAT Cooler

STAT Analysis Corporation 5 AI Cooler 2242 W. Harrison, Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386 e-mail address: STATinfo@STATAnalysis.com AIHA, NVLAP and NELAP accredited

				(CHA	IN OF C	USTODY REC	CORD	Nº:	85085	54 Page :	1 of 3
Company: Weston Solutio	NS, INC						P.O. No.:					
Project Number:			Client	Track	ing N	lo.:			1	11/1	/////	111
Project Name: Pilsen Soil	Site						Quote No.:		11	1///	/////	////
Project Location: Pilsen, Chico								/	1//	1///	/////	///
Sampler(s): D. SENA & W.	BUDD							_//	11	1///	/////	//
Report To: Tonya Balla		Phone:	847	- 918	3 - 6	1094	2	39 3	9//	1///	/////	Turn Around
1		Fax:						12/2	1//	11/1	1////4	andard
QC Level: 1 2 3	4	e-mail: T	onya.B	Ila Oh	lestor	Solutions	ian /	14/	111	11/1	111-	Results Needed
Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	No. (Contain	1 107.09	1//	///	///	Remarks	am/pm Lab No.:
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1A- 489-01(6-18)-081213	8-12-13	1445	1	1	1	i I I						002
PA- 490-01(00)-081213	8-12-13	1530					XX					ans
PA-491-01(0-0)-081213	8-12-B	1620		TT			XX					004
192-491 - 01 (6-19)-051213	8-12-13	1625		TT			XX					005
PA-491-01(6-18)-081213D	8-12-13	1630		TIT		111	XX					006
PA-492-01(0-6)-081313	8-13-13	1000					XX				1	002
11-493-01 (0-6)-081313	8-13-13				-	1.1.30	XX					604
PA-494 - 01 (0-6)-081313	8-13-13	1200					XX					009
194-495-01 (0-6)-081313	8-13-13	1400			1		XX					010
RA-495-01 (6-24)-081313	8-13-13	14:05			-		XX					Oll
19-496-01 (0-6)-081313	8-13-13		1		-		XX					012
PA-497-01 (0-6)-081313	8-13-13			14	-		XX					OR
PA-498 -01(0-6)-081313	8-13-13	1650		11	-		XX					014
18-498 - 01 (0-Q-091313D	8-13-13	1655			-		XX					015
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1A-499-01(0-6)-081413	8-14-13	945	-	+++	-	111	- CK				Perform ms/msp	DIF
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1 19-501 -01 (0-6)-081413	18-14-13	1200	V	1	-	* *						pho -
Relinquished by (Signature)							Comments:		DI 7	1.4	Laberatory Work Or	ler No.:
Received by (Signature)		-			811	6/13/16	TE Selec	t metals	- 15, 8	n, co, ng	1704	10054
recimitance of totherates				/Time	_		-	Cd.	Sn, Sb.	in, Lu, Hy Cr		
Received by: (Signature)				/Time:	-						Received on Ice:	ies No
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Received by: (Signature)			Date	/Time	24	-	$D = H_2 SO_4$	E = HCI $F = 50$.	35/EnCore G	= Other		12-1 Superior

Page 92 of 124



Page 93 of 124

STAT Analysis Corporation Dtat 2242 W. Harrison, Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386 e-mail address: STATinfo@STATAnalysis.com AIHA, NVLAP and NELAP accredited

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Company: Wiston Solutions, 1)	NC.			-					P.O. 1	lo.:	1	T											
Project Number:			Clien	t Tra	king	No.:					_	_			1	//	1	11	17	11	/	11	7
Project Name: Pilsen Soil Site									Quote	No.:				1	/	//	1	11	//	//	/	//	1
Project Location: Pilsch, Chicago, 1	L								-				1	11	/	//	//	//	//	11	/	11	- (
Sampler(s): Dave Sing & Willie	um Budd		-					1					//	11	/	//	//	11	//	11	/	/	
Report To: Tenra Balla		Phone:	847-0	118-4	094			-				/	13	//	//	//	//	11	//	11	/	Turn Are	und
		Fax:	100								1	5/	Y,	//	//	/	//	1/	//	11			
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PA-506-01(0-6)-081513	S-15-B	1140								-						_	11					014	
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Received by (Signature)			Da	te/Time	8	161	13 1	16.42	Se	<i>lect</i>	me	tals	= h	022	en, c	.4,0	r.,	HG)		121	6	105	7
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Test	Am			AND CHAIN	OF CUSTODY R	ECO	RD	C	510	America : 2 LaRoche annah, GA				Ph	ebsite: www ione: (912) ix: (912) 35		ainc.com	
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	R IN ENVIRO	NMENTAL	PROJECT NO.		PROJECT LOCATION		ATRI	1	5	ITI	Analys	15 (orp	Fa	x;	PAGE	10	OF 2
Pilsen 4	Soil Sile		THOSE OT HO.		(STATE)		TYPE				REQU	UIRED A	NALYSIS				3	of 3
AL (LAB) PROJE	CT MANAGER		P.O. NUMBER		CONTRACT NO.	щ		1		2C						DELIVERY	D REPORT	d
LIENT (SITE) PN	Tonya Y	0.11.	CLIENT PHONE	in the still	CLIENT FAX	COMPOSITE (C) OR GRAB (G) INDICATE AQUEOUS (WATER)		AIR NONAQUEOUS LIQUID (OIL, SOLVENT,)	select metals	Five-9: called						DATE	DUE	-
LIENT NAME	ionya i	salla	CLIENT E-MAIL	वा४-५०५५		C) IN		SOL	2	Allo						EXPEDITE	D REPORT	
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8-16-13	14.90	0A- 51	16-01(01 16-01(01 16-01(6-1	3-0616	13		X		X	X				1		-		
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1	and and and a					LABO	RATO	ORY U	SE ONLY									
RECEIVED FOR I SIGNATURE)	LABORATORY BY	Y:	DATE	TIME	CUSTODY INTACT	CUS			SAVA		LABORA	ATORY F	REMARKS		1-	308	nla	29

TAL8240-680 (1008)

Sam	ple Rec	eipt Cl	necklist		
Client Name WESTON VERNON HILLS			Date and Tin	ne Received: 8	8/16/2013 4:42:00 P
Work Order Number 13080639	~		Received by	DO	
	4/1 Date	7/13	Reviewed by	EMP	8/20/17
Matrix: Carrier n	ame <u>Clie</u>	nt Delivere	ed		
Shipping container/cooler in good condition?	Yes	~	No 🗌	Not Present	
Custody seals intact on shippping container/cooler?	Yes		No 🗌	Not Present	
Custody seals intact on sample bottles?	Yes		No 🗔	Not Present	
Chain of custody present?	Yes	~	No 🗔		
Chain of custody signed when relinquished and received?	Yes	V	No 🗔		
Chain of custody agrees with sample labels/containers?	Yes	V	No		
Samples in proper container/bottle?	Yes		No 🗌		
Sample containers intact?	Yes	V	No 🗔		
Sufficient sample volume for indicated test?	Yes	V	No 🗔		
All samples received within holding time?	Yes	V	No 🗔		
Container or Temp Blank temperature in compliance?	Yes	~	No 🗌	Temperature	4.5 °C
Vater - VOA vials have zero headspace? No VOA vials	submitted		Yes 🗔	No 🗔	
Vater - Samples pH checked?	Yes		No 🗔	Checked by:	
Vater - Samples properly preserved?	Yes		No	pH Adjusted?	
any No response must be detailed in the comments section below	ow.				
	2223				
Comments					
Client / Person Date contacted:	-		Conta	cted by:	
esponse					

PREP BATCH REPORT

Prep Start Date:	8/23/2013 11:45:47
Prep End Date:	8/23/2013 2:30:00 P

Prep End Date: 8 Prep Batch 71524		0:00 P ode: M_S	_ PREP Te	chnician: VA	Prep Factor Units: mL / g								
Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd				
IMBS2 8/23/13			1	0	0	50	50.000	8/23/2013	8/23/2013				
ILCSS2 8/23/13			1	0	0	50	50.000	8/23/2013	8/23/2013				
13080662-001B	Soil		1.05	0	0	50	47.619	8/23/2013	8/23/2013				
13080701-001B	Soil		1.065	0	0	50	46.948	8/23/2013	8/23/2013				
13080701-002B	Soil		1.121	0	0	50	44.603	8/23/2013	8/23/2013				
13080701-003B	Soil		1.054	0	0	50	47.438	8/23/2013	8/23/2013				
13080701-003BMS	Soil		1.053	0	0	50	47.483	8/23/2013	8/23/2013				
13080701-003BMSD	Soil		1.052	0	0	50	47.529	8/23/2013	8/23/2013				
13080701-004B	Soil		1.024	0	0	50	48.828	8/23/2013	8/23/2013				
13080701-005B	Soil		1.034	0	0	50	48.356	8/23/2013	8/23/2013				
13080701-006B	Soil		1.048	0	0	50	47.710	8/23/2013	8/23/2013				
13080701-007B	Soil		1.04	0	0	50	48.077	8/23/2013	8/23/2013				
13080701-008B	Soil		1.029	0	0	50	48.591	8/23/2013	8/23/2013				
13080807-001A	Soil		1.048	0	0	50	47.710	8/23/2013	8/23/2013				
13080807-002A	Soil		1.141	0	0	50	43.821	8/23/2013	8/23/2013				
13080807-003A	Soil		1.078	0	0	50	46.382	8/23/2013	8/23/2013				
13080768-001B	Soil		1.09	0	0	50	45.872	8/23/2013	8/23/2013				
13080768-003B	Soil		1.071	0	0	50	46.685	8/23/2013	8/23/2013				
13080768-004B	Soil		1.02	0	0	50	49.020	8/23/2013	8/23/2013				
13080768-006B	Soil		1.02	0	0	50	49.020	8/23/2013	8/23/2013				
13080768-008B	Soil		1.081	0	0	50	46.253	8/23/2013	8/23/2013				
13080639-040A	Soil		1.031	0	0	50	48.497	8/23/2013	8/23/2013				
13080639-040AMS	Soil		1.04	0	0	50	48.077	8/23/2013	8/23/2013				
13080639-040AMSD	Soil		1.036	0	0	50	48.263	8/23/2013	8/23/2013				

Weston Solutions CLIENT:

Work Order: 13080639

Pilsen Soil Site, Pilsen, Chicago, IL **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: 71524

Sample ID	IMBS2 8/23/13	SampType:	MBLK	TestCod	le: M_ICPMS	S_S Units: mg/Kg		Prep Dat	e: 8/23/2	013	Run ID: IC	PMS_13082	3A
Client ID:	ZZZZZ	Batch ID:	71524	TestN	lo: SW6020			Analysis Dat	te: 8/23/2	013	SeqNo: 25	00386	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
Antimony			ND	1.0									
Cadmium			0.135	0.25									J
Chromium			0.137	0.50									J
Copper			ND	1.2									
_ead			0.224	0.25									J
Tin			1.592	2.5									J*
Zinc			ND	2.5									
Sample ID	ILCSS2 8/23/13	SampType:	LCS	TestCod	le: M_ICPMS	S_S Units: mg/Kg		Prep Dat	e: 8/23/2	013	Run ID: IC	PMS_13082	3A
Client ID:	ZZZZZ	Batch ID:	71524	TestN	lo: SW6020			Analysis Dat	te: 8/23/2	013	SeqNo: 25	00387	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
Antimony			14.95	1.0	12.5	0	120	80	120	0	0		
Cadmium			24.66	0.25	25	0.135	98.1	80	120	0	0		
Chromium			25.41	0.50	25	0.137	101	80	120	0	0		
Copper			25.3	1.2	25	0	101	80	120	0	0		
_ead			25.23	0.25	25	0.224	100	80	120	0	0		
Tin			14.32	2.5	12.5	1.592	102	80	120	0	0		*
Zinc			23.55	2.5	25	0	94.2	80	120	0	0		
Sample ID	13080639-040AMS	SampType:	MS	TestCoc	le: M_ICPMS	S_S Units: mg/Kg	-dry	Prep Dat	e: 8/23/2	013	Run ID: IC	PMS-2_1308	323A
Client ID:	PA-515-01(0-6)-0816	Batch ID:	71524	TestN	lo: SW6020			Analysis Dat	te: 8/23/2	013	SeqNo: 25	00330	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
Antimony			21.14	4.8	14.86	9.154	80.7	75	125	0	0		
Cadmium			36.08	1.2	29.71	7.403	96.5	75	125	0	0		
Chromium			53.16	2.4	29.71	22.17	104	75	125	0	0		
Copper			179.1	5.9	29.71	136.9	142	75	125	0	0		S
			1751	1.2	29.71	1558	649	75	125	0	0		S
Lead								75	125	0	0		S

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

Page 97 of 124

CLIENT: Weston Solutions

Work Order:

13080639

Pilsen Soil Site, Pilsen, Chicago, IL **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: 71524

Sample ID	13080639-040AMS	SampType:	MS	TestCod	e: M_ICPMS	S_S Units: mg	/Kg-dry	Prep Dat	e: 8/23/20	013	Run ID: ICF	PMS_130823	A
Client ID:	PA-515-01(0-6)-0816	Batch ID:	71524	TestN	o: SW6020			Analysis Da	te: 8/23/20	013	SeqNo: 250	00421	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tin			68.52	12	14.86	28.9	267	75	125	0	0		S*
Sample ID	13080639-040AMSD	SampType:	MSD	TestCod	e: M_ICPMS	S _S Units: mg	/Kg-dry	Prep Dat	e: 8/23/20	013	Run ID: ICF	PMS-2_1308	23A
Client ID:	PA-515-01(0-6)-0816	Batch ID:	71524	TestN	o: SW6020			Analysis Da	te: 8/23/20	013	SeqNo: 250	00332	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			20.46	4.8	14.91	9.154	75.8	75	125	21.14	3.31	20	
Cadmium			38.45	1.2	29.83	7.403	104	75	125	36.08	6.36	20	
Chromium			56.9	2.4	29.83	22.17	116	75	125	53.16	6.80	20	
Copper			199.7	6.0	29.83	136.9	211	75	125	179.1	10.9	20	S
Lead			2347	1.2	29.83	1558	2640	75	125	1751	29.1	20	SR
Zinc			1139	12	29.83	1052	291	75	125	1031	9.93	20	S
Sample ID	13080639-040AMSD	SampType:	MSD	TestCod	e: M_ICPMS	S_S Units: mg	/Kg-dry	Prep Dat	e: 8/23/20	013	Run ID: ICF	PMS_130823	A
Client ID:	PA-515-01(0-6)-0816	Batch ID:	71524	TestN	o: SW6020			Analysis Da	te: 8/23/20	013	SeqNo: 250	00422	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tin			41.16	12	14.91	28.9	82.2	75	125	68.52	49.9	20	R*

Qualifiers:	ND - Not Detected at the Reporting Limit
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J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

PREP BATCH REPORT

Prep Start Date:	8/21/2013 9:40:03 A
Prep End Date:	8/21/2013 4:50:00 P

Prep End Date: 8 Prep Batch 71436		ode: M_S		chnician: VA		Р	rep Factor L mL / g	Jnits:	
Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
IMBS3 8/20/13			1	0	0	50	50.000	8/20/2013	8/20/2013
ILCSS3 8/20/13			1	0	0	50	50.000	8/20/2013	8/20/2013
13080637-001B	Soil		1.094	0	0	50	45.704	8/20/2013	8/20/2013
13080637-001BMS	Soil		1.074	0	0	50	46.555	8/20/2013	8/20/2013
13080637-001BMSD	Soil		1.076	0	0	50	46.468	8/20/2013	8/20/2013
13080598-001A	Solid		1.029	0	0	50	48.591	8/20/2013	8/20/2013
13080598-002A	Solid		1.004	0	0	50	49.801	8/20/2013	8/20/2013
13080598-003A	Solid		0.516	0	0	50	96.899	8/20/2013	8/20/2013
13080598-004A	Solid		0.992	0	0	50	50.403	8/20/2013	8/20/2013
13080681-001B	Soil		1.071	0	0	50	46.685	8/20/2013	8/20/2013
13080682-001A	Soil		1.13	0	0	50	44.248	8/20/2013	8/20/2013
13080692-001A	Soil		1.075	0	0	50	46.512	8/20/2013	8/20/2013
13080639-041A	Soil		1.079	0	0	50	46.339	8/21/2013	8/21/2013
13080639-042A	Soil		1.041	0	0	50	48.031	8/21/2013	8/21/2013
13080639-043A	Soil		1.033	0	0	50	48.403	8/21/2013	8/21/2013
13080639-043AMS	Soil		1.034	0	0	50	48.356	8/21/2013	8/21/2013
13080639-043AMSD	Soil		1.031	0	0	50	48.497	8/21/2013	8/21/2013

CLIENT: Weston Solutions Work Order:

13080639

Project: Pilsen Soil Site, Pilsen, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 71436

Sample ID	IMBS3 8/20/13	SampType:			de: M_ICPMS	S_S Units: mg/Kg		Prep Dat	e: 8/20/2	013	Run ID: ICI	PMS_13082	1B
Client ID:	ZZZZZ	Batch ID:	71436	TestN	lo: SW6020			Analysis Da	te: 8/21/2	013	SeqNo: 24	98757	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			ND	1.0									
Cadmium			0.142	0.25									J
Chromium			0.2965	0.50									J
Copper			0.196	1.2									J
Lead			0.184	0.25									J
Tin			1.526	2.5									J*
Zinc			ND	2.5									
Sample ID	ILCSS3 8/20/13	SampType:	LCS	TestCoo	de: M_ICPMS	S_S Units: mg/Kg		Prep Dat	e: 8/20/2	013	Run ID: ICI	PMS_13082	1B
Client ID:	ZZZZZ	Batch ID:	71436	TestN	lo: SW6020			Analysis Da	te: 8/21/2	013	SeqNo: 24	98758	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			14.4	1.0	12.5	0	115	80	120	0	0		
Cadmium			23.73	0.25	25	0.142	94.4	80	120	0	0		
Chromium			24.58	0.50	25	0.2965	97.2	80	120	0	0		
Copper			25.04	1.2	25	0.196	99.4	80	120	0	0		
Lead			24.8	0.25	25	0.184	98.5	80	120	0	0		
Tin			13.63	2.5	12.5	1.526	96.8	80	120	0	0		*
Zinc			23.28	2.5	25	0	93.1	80	120	0	0		
Sample ID	13080637-001BMS	SampType:	MS	TestCoo	de: M_ICPMS	S_S Units: mg/Kg	J-dry	Prep Dat	e: 8/20/2	013	Run ID: ICI	PMS_13082	1B
Client ID:	ZZZZZ	Batch ID:	71436	TestN	lo: SW6020			Analysis Da	te: 8/21/2	013	SeqNo: 24	98764	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			2.31	2.2	13.89	0	16.6	75	125	0	0		S
			26.78	0.56	27.78	0.7205	93.8	75	125	0	0		
Cadmium			40.00	4.4	27.78	18.55	88	75	125	0	0		
			42.98	1.1	=								
Chromium			42.98 44.62	2.8	27.78	23.38	76.5	75	125	0	0		
Chromium Copper						23.38 15.27	76.5 90.5	75 75	125 125	0 0	0 0		
Cadmium Chromium Copper Lead Tin			44.62	2.8	27.78					-	-		*

Qualifiers: Not Detected at the Reporting Limit ND -

E - Value above quantitation range

J - Analyte detected below quantitation limits * - Non Accredited Parameter

H/HT - Holding Time Exceeded

R - RPD outside accepted recovery limits

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CLIENT: Weston Solutions Work Order: 13080639

ANALYTICAL QC SUMMARY REPORT

Project:

Pilsen Soil Site, Pilsen, Chicago, IL

BatchID: 71436

Sample ID	13080639-043AMS	SampType:	MS	TestCoo	de: M_ICPMS	5_S Units: m g	g/Kg-dry	Prep Dat	te: 8/21/2	013	Run ID: IC	PMS-2_1308	22A
Client ID:	PA-516-01(6-18)-081	Batch ID:	71436	TestN	lo: SW6020			Analysis Da	te: 8/22/2	013	SeqNo: 24	99197	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			9.087	4.8	14.91	0	61	75	125	0	0		S
Cadmium			32.69	1.2	29.81	3.232	98.8	75	125	0	0		
Chromium			51.27	2.4	29.81	23.6	92.8	75	125	0	0		
Copper			94.39	6.0	29.81	63.68	103	75	125	0	0		
Lead			729.8	1.2	29.81	547	613	75	125	0	0		S
Tin			28.33	12	14.91	9.573	126	75	125	0	0		S*
Zinc			650.5	12	29.81	607	146	75	125	0	0		S
Sample ID	13080637-001BMSD	SampType:	MSD	TestCo	de: M_ICPMS	5_S Units: m g	g/Kg-dry	Prep Dat	te: 8/20/2	013	Run ID: IC	PMS_130821	IB
Client ID:	ZZZZZ	Batch ID:	71436	TestN	lo: SW6020			Analysis Da	te: 8/21/2	013	SeqNo: 24	98765	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			2.339	2.2	13.86	0	16.9	75	125	2.31	1.25	20	S
Cadmium			27.2	0.55	27.73	0.7205	95.5	75	125	26.78	1.54	20	
Chromium			43.71	1.1	27.73	18.55	90.7	75	125	42.98	1.67	20	
Copper			47.42	2.8	27.73	23.38	86.7	75	125	44.62	6.09	20	
Lead			42.39	0.55	27.73	15.27	97.8	75	125	40.41	4.79	20	
Tin			13.19	5.5	13.86	0	95.1	75	125	12.73	3.54	20	*
Zinc			77.35	5.5	27.73	50.26	97.7	75	125	73.05	5.72	20	
Sample ID	13080639-043AMSD	SampType:	MSD	TestCoo	de: M_ICPMS	S_S Units: mg	g/Kg-dry	Prep Dat	te: 8/21/2	013	Run ID: IC	PMS-2_1308	22A
Client ID:	PA-516-01(6-18)-081	Batch ID:	71436	TestN	lo: SW6020			Analysis Da	te: 8/22/2	013	SeqNo: 24	99198	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			8.234	4.8	14.95	0	55.1	75	125	9.087	9.84	20	S
Cadmium			33.04	1.2	29.9	3.232	99.7	75	125	32.69	1.05	20	
Chromium			54.42	2.4	29.9	23.6	103	75	125	51.27	5.95	20	
Copper			101.6	6.0	29.9	63.68	127	75	125	94.39	7.36	20	S
Lead			690.1	1.2	29.9	547	479	75	125	729.8	5.60	20	S
Tin			32.28	12	14.95	9.573	152	75	125	28.33	13.0	20	S*
Zinc			654.2	12	29.9	607	158	75	125	650.5	0.565	20	S
Oualifiers	S: ND - Not Detec	ted at the Re	porting Limit		S - Spi	ke Recovery out	side accepted r	ecoverv limit	ts	B - Analyte detec	ted in the asso	ciated Metho	d Blank

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

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PREP BATCH REPORT

Prep Start Date:	8/20/2013 4:30:20 P
Prep End Date:	8/20/2013 7:10:00 P

Prep End Date: Prep Batch 7143	7 Prep C	D:00 P Dde: M_S	_ PREP Te	chnician: VA		P	rep Factor L mL / g	Jnits:	
Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
IMBS4 8/20/13			1	0	0	50	50.000	8/20/2013	8/20/2013
ILCSS4 8/20/13			1	0	0	50	50,000	8/20/2013	8/20/2013

IMBS4 8/20/13		1	0	0	50	50.000	8/20/2013	8/20/2013
ILCSS4 8/20/13		1	0	0	50	50.000	8/20/2013	8/20/2013
13080639-001A	Soil	1.125	0	0	50	44.444	8/20/2013	8/20/2013
13080639-002A	Soil	1.083	0	0	50	46.168	8/20/2013	8/20/2013
13080639-003A	Soil	1.081	0	0	50	46.253	8/20/2013	8/20/2013
13080639-004A	Soil	1.011	0	0	50	49.456	8/20/2013	8/20/2013
13080639-005A	Soil	1.035	0	0	50	48.309	8/20/2013	8/20/2013
13080639-006A	Soil	1.12	0	0	50	44.643	8/20/2013	8/20/2013
13080639-007A	Soil	1.111	0	0	50	45.005	8/20/2013	8/20/2013
13080639-008A	Soil	1.134	0	0	50	44.092	8/20/2013	8/20/2013
13080639-009A	Soil	1.048	0	0	50	47.710	8/20/2013	8/20/2013
13080639-010A	Soil	1.215	0	0	50	41.152	8/20/2013	8/20/2013
13080639-011A	Soil	1.172	0	0	50	42.662	8/20/2013	8/20/2013
13080639-012A	Soil	1.038	0	0	50	48.170	8/20/2013	8/20/2013
13080639-013A	Soil	1.129	0	0	50	44.287	8/20/2013	8/20/2013
13080639-014A	Soil	1.202	0	0	50	41.597	8/20/2013	8/20/2013
13080639-015A	Soil	1.07	0	0	50	46.729	8/20/2013	8/20/2013
13080639-016A	Soil	1.013	0	0	50	49.358	8/20/2013	8/20/2013
13080639-017A	Soil	1.035	0	0	50	48.309	8/20/2013	8/20/2013
13080639-017AMS	Soil	1.035	0	0	50	48.309	8/20/2013	8/20/2013
13080639-017AMSD	Soil	1.034	0	0	50	48.356	8/20/2013	8/20/2013
13080639-018A	Soil	1.055	0	0	50	47.393	8/20/2013	8/20/2013
13080639-019A	Soil	1.185	0	0	50	42.194	8/20/2013	8/20/2013
13080639-020A	Soil	1.114	0	0	50	44.883	8/20/2013	8/20/2013

BatchID: 71437 Project: Pilsen Soil Site, Pilsen, Chicago, IL Sample ID IMBS4 8/20/13 SampType: MBLK TestCode: M_ICPMS_S Units: mg/Kg Prep Date: 8/20/2013 Run ID: ICPMS_130820A ZZZZZ Batch ID: 71437 TestNo: SW6020 Analysis Date: 8/21/2013 SeqNo: 2497284 Client ID: Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual 1.0 Antimony ND ND 0.25 Cadmium J Chromium 0.081 0.50 Copper ND 1.2 ND 0.25 Lead J* Tin 2.052 2.5 Zinc ND 2.5 Sample ID ILCSS4 8/20/13 TestCode: M_ICPMS_S Units: mg/Kg Prep Date: 8/20/2013 Run ID: ICPMS_130821A SampType: LCS Analysis Date: 8/21/2013 Client ID: **ZZZZZ** Batch ID: 71437 TestNo: SW6020 SeqNo: 2498116 PQL SPK Ref Val LowLimit HighLimit **RPD** Ref Val %RPD RPDLimit Analyte Result SPK value %REC Qual 14.32 1.0 12.5 0 115 80 120 0 0 Antimony Cadmium 23.43 0.25 25 0 93.7 80 120 0 0 0 Chromium 24.32 0.50 25 0.081 97 80 120 0 24.28 1.2 25 97.1 80 0 Copper 0 120 0 25 80 0 Lead 24.38 0.25 0 97.5 120 0 Tin 13.38 2.5 12.5 2.052 90.6 80 120 0 0 80 Zinc 22.8 2.5 25 0 91.2 120 0 0 13080639-017AMS Run ID: ICPMS_130820A Sample ID SampType: MS TestCode: M_ICPMS_S Units: mg/Kg-dry Prep Date: 8/20/2013 Client ID: PA-499-01(0-6)-0814 Batch ID: 71437 TestNo: SW6020 Analysis Date: 8/21/2013 SeqNo: 2497290 PQL SPK Ref Val RPDLimit Result SPK value %REC LowLimit HighLimit **RPD** Ref Val %RPD Qual Analyte Copper 108.1 14 28.19 85.57 80 75 125 0 0 Sample ID 13080639-017AMS SampType: MS TestCode: M_ICPMS_S Units: mg/Kg-dry Prep Date: 8/20/2013 Run ID: ICPMS-2_130822A Client ID: PA-499-01(0-6)-0814 Batch ID: 71437 TestNo: SW6020 Analysis Date: 8/22/2013 SeqNo: 2499206 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit **RPD** Ref Val %RPD RPDLimit Qual Analyte Antimony 10.25 4.5 14.09 2.141 57.6 75 125 0 0 S Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

E - Value above quantitation range

ANALYTICAL QC SUMMARY REPORT

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13080639

Weston Solutions

CLIENT: Work Order:

Weston Solutions **CLIENT:**

Work Order:

13080639

Project: Pilsen Soil Site, Pilsen, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 71437

Sample ID	13080639-017AMS	SampType:	MS	TestCod	e: M_ICPMS	S_S Units: mg	g/Kg-dry	Prep Date	e: 8/20/2	013	Run ID: IC	PMS-2_1308	22A
Client ID:	PA-499-01(0-6)-0814	Batch ID:	71437	TestN	o: SW6020			Analysis Dat	e: 8/22/2	013	SeqNo: 24	99206	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium			31.6	1.1	28.19	2.488	103	75	125	0	0		
Chromium			39.58	2.3	28.19	14.41	89.3	75	125	0	0		
Lead			940.8	1.1	28.19	1153	-754	75	125	0	0		S
Tin			40.64	11	14.09	25.54	107	75	125	0	0		*
Zinc			640.9	11	28.19	497.4	509	75	125	0	0		S
Sample ID	13080639-017AMSD	SampType:	MSD	TestCod	e: M_ICPMS	S Units: mg	g/Kg-dry	Prep Date	e: 8/20/2	013	Run ID: IC	PMS_130820	A
Client ID:	PA-499-01(0-6)-0814	Batch ID:	71437	TestN	o: SW6020			Analysis Dat	e: 8/21/2	013	SeqNo: 24	97291	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper			112.3	14	28.21	85.57	94.9	75	125	108.1	3.83	20	
Sample ID	13080639-017AMSD	SampType:	MSD	TestCod	e: M_ICPMS	S_S Units: mg	g/Kg-dry	Prep Date	e: 8/20/2	013	Run ID: IC	PMS-2_1308	22A
Client ID:	PA-499-01(0-6)-0814	Batch ID:	71437	TestN	o: SW6020			Analysis Dat	e: 8/22/2	013	SeqNo: 24	99208	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			10.8	4.5	14.11	2.141	61.4	75	125	10.25	5.19	20	S
Cadmium			30.87	1.1	28.21	2.488	101	75	125	31.6	2.32	20	
Chromium			41.12	2.3	28.21	14.41	94.6	75	125	39.58	3.81	20	
Lead			988	1.1	28.21	1153	-586	75	125	940.8	4.89	20	S
Tin			32.57	11	14.11	25.54	49.9	75	125	40.64	22.0	20	SR*
Zinc			564.2	11	28.21	497.4	237	75	125	640.9	12.7	20	S

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Non Accredited Parameter

R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

PREP BATCH REPORT

Prep Start Date:	8/21/2013 9:40:45 A
Prep End Date:	8/21/2013 12:55:00

Prep End Date: 8 Prep Batch 71453		ode: M_S	PREP Te	chnician: VA		Р	rep Factor L mL / g	Jnits:	
Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
IMBS1 8/21/13			1	0	0	50	50.000	8/21/2013	8/21/2013
ILCSS1 8/21/13			1	0	0	50	50.000	8/21/2013	8/21/2013
13080639-021A	Soil		1.091	0	0	50	45.830	8/21/2013	8/21/2013
13080639-022A	Soil		1.137	0	0	50	43.975	8/21/2013	8/21/2013
13080639-023A	Soil		1.02	0	0	50	49.020	8/21/2013	8/21/2013
13080639-024A	Soil		1.112	0	0	50	44.964	8/21/2013	8/21/2013
13080639-025A	Soil		1.035	0	0	50	48.309	8/21/2013	8/21/2013
13080639-026A	Soil		1.016	0	0	50	49.213	8/21/2013	8/21/2013
13080639-027A	Soil		1.195	0	0	50	41.841	8/21/2013	8/21/2013
13080639-028A	Soil		1.005	0	0	50	49.751	8/21/2013	8/21/2013
13080639-029A	Soil		1.14	0	0	50	43.860	8/21/2013	8/21/2013
13080639-030A	Soil		1.066	0	0	50	46.904	8/21/2013	8/21/2013
13080639-031A	Soil		1.197	0	0	50	41.771	8/21/2013	8/21/2013
13080639-032A	Soil		1.021	0	0	50	48.972	8/21/2013	8/21/2013
13080639-033A	Soil		1.111	0	0	50	45.005	8/21/2013	8/21/2013
13080639-034A	Soil		1.06	0	0	50	47.170	8/21/2013	8/21/2013
13080639-035A	Soil		1.018	0	0	50	49.116	8/21/2013	8/21/2013
13080639-036A	Soil		1.19	0	0	50	42.017	8/21/2013	8/21/2013
13080639-037A	Soil		1.205	0	0	50	41.494	8/21/2013	8/21/2013
13080639-038A	Soil		1.139	0	0	50	43.898	8/21/2013	8/21/2013
13080639-039A	Soil		1.041	0	0	50	48.031	8/21/2013	8/21/2013
13080639-040A	Soil		1.184	0	0	50	42.230	8/21/2013	8/21/2013
13080639-040AMS	Soil		1.182	0	0	50	42.301	8/21/2013	8/21/2013
13080639-040AMSD	Soil		1.187	0	0	50	42.123	8/21/2013	8/21/2013

CLIENT: Weston Solutions

Work Order: 13080639

Pilsen Soil Site, Pilsen, Chicago, IL **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: 71453

Sample ID	IMBS1 8/21/13	SampType:	MBLK	TestCo	de: M_ICPMS	S_S Units: mg/Kg		Prep Date	e: 8/21/2	013	Run ID: ICF	PMS_13082	2A
Client ID:	ZZZZZ	Batch ID:	71453	Test	lo: SW6020			Analysis Dat	e: 8/22/2	013	SeqNo: 249	99369	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
Antimony			ND	1.0									
Cadmium			0.161	0.25									J
Chromium			0.1985	0.50									J
Copper			0.193	1.2									J
Lead			0.1975	0.25									J
Tin			1.582	2.5									J,
Zinc			ND	2.5									
Sample ID	ILCSS1 8/21/13	SampType:	LCS	TestCo	de: M_ICPMS	S_S Units: mg/Kg		Prep Date	e: 8/21/2	013	Run ID: ICI	PMS_13082	2A
Client ID:	ZZZZZ	Batch ID:	71453	Test	lo: SW6020			Analysis Date	e: 8/22/2	013	SeqNo: 249	99370	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
Antimony			15.31	1.0	12.5	0	122	80	120	0	0		S
Cadmium			24.74	0.25	25	0.161	98.3	80	120	0	0		
Chromium			24.87	0.50	25	0.1985	98.7	80	120	0	0		
Copper			24.9	1.2	25	0.193	98.8	80	120	0	0		
Lead			25.14	0.25	25	0.1975	99.8	80	120	0	0		
Tin			14.28	2.5	12.5	1.582	102	80	120	0	0		*
Zinc			23.98	2.5	25	0	95.9	80	120	0	0		
Sample ID	13080639-040AMS	SampType:	MS	TestCo	de: M_ICPMS	S_S Units: mg/Kg	dry	Prep Date	e: 8/21/2	013	Run ID: ICI	PMS_13082	2A
Client ID:	PA-515-01(0-6)-0816	Batch ID:	71453	Test	lo: SW6020			Analysis Date	e: 8/22/2	013	SeqNo: 249	99375	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
Antimony			10.07	4.2	13.07	3.527	50.1	75	125	0	0		S
Cadmium			33.3	1.0	26.14	8.107	96.4	75	125	0	0		
			52.55	2.1	26.14	27.84	94.5	75	125	0	0		
Chromium						152.0	169	75	125	0	0		S
			197.1	5.2	26.14	152.9	100		-				
Copper			197.1 1829	5.2 1.0	26.14 26.14	2202	-1430	75	125	0	0		
Chromium Copper Lead Tin										0 0	0 0		S *

E - Value above quantitation range

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

Weston Solutions **CLIENT:** Work Order:

13080639

Project: Pilsen Soil Site, Pilsen, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 71453

Sample ID Client ID:	13080639-040AMSD PA-515-01(0-6)-0816	1 51			de: M_ICPMS lo: SW6020	S Units: mg/	0,	Prep Da Analysis Da	te: 8/21/2		Run ID: ICI SegNo: 24	PMS_130822 99376	2A
Analyte	1 - 513-01(0-0)-0010	Daton ID.	Result	PQL		SPK Ref Val	%REC	,	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony			9.06	4.2	13.02	3.527	42.5	75	125	10.07	10.6	20	S
Cadmium			32.04	1.0	26.03	8.107	91.9	75	125	33.3	3.87	20	
Chromium			48.71	2.1	26.03	27.84	80.2	75	125	52.55	7.58	20	
Copper			154.4	5.2	26.03	152.9	5.92	75	125	197.1	24.3	20	SR
Lead			1450	1.0	26.03	2202	-2890	75	125	1829	23.1	20	SR
Tin			55.09	10	13.02	33.57	165	75	125	49.43	10.8	20	S*
Zinc			877.9	10	26.03	1040	-622	75	125	1053	18.1	20	S

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

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PREP BATCH REPORT

Prep Factor Units: mL/g

0 Prep Code	e: M_S_	_ PREP T	echnician: VA	
Matrix	рН	SampAmt	Sol Added	
		1	0	
		1	0	
Soil		1.069	0	
Soil		1 070	0	
	8/22/2013 1:05:0 0 Prep Code Matrix Soil	Matrix pH	8/22/2013 1:05:00 P 0 Prep Code: M_S_PREP T Matrix pH SampAmt 1 1	8/22/2013 1:05:00 P Technician: VA 0 Prep Code: M_S_PREP Technician: VA Matrix pH SampAmt Sol Added 1 0 1 0 Soil 1.069 0

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
IMBS1 8/22/13			1	0	0	50	50.000	8/22/2013	8/22/2013
ILCSS1 8/22/13			1	0	0	50	50.000	8/22/2013	8/22/2013
13080639-001B	Soil		1.069	0	0	50	46.773	8/22/2013	8/22/2013
13080639-002B	Soil		1.079	0	0	50	46.339	8/22/2013	8/22/2013
13080639-003B	Soil		1.064	0	0	50	46.992	8/22/2013	8/22/2013
13080639-004B	Soil		1.017	0	0	50	49.164	8/22/2013	8/22/2013
13080639-005B	Soil		1.054	0	0	50	47.438	8/22/2013	8/22/2013
13080639-006B	Soil		1.039	0	0	50	48.123	8/22/2013	8/22/2013
13080639-007B	Soil		1.036	0	0	50	48.263	8/22/2013	8/22/2013
13080639-008B	Soil		1.033	0	0	50	48.403	8/22/2013	8/22/2013
13080639-009B	Soil		1.024	0	0	50	48.828	8/22/2013	8/22/2013
13080639-010B	Soil		1.048	0	0	50	47.710	8/22/2013	8/22/2013
13080639-011B	Soil		1.001	0	0	50	49.950	8/22/2013	8/22/2013
13080639-012B	Soil		1.087	0	0	50	45.998	8/22/2013	8/22/2013
13080639-013B	Soil		1.014	0	0	50	49.310	8/22/2013	8/22/2013
13080639-014B	Soil		1.078	0	0	50	46.382	8/22/2013	8/22/2013
13080639-015B	Soil		1.037	0	0	50	48.216	8/22/2013	8/22/2013
13080639-016B	Soil		1.043	0	0	50	47.939	8/22/2013	8/22/2013
13080639-017B	Soil		1.002	0	0	50	49.900	8/22/2013	8/22/2013
13080639-017BMS	Soil		1.017	0	0	50	49.164	8/22/2013	8/22/2013
13080639-017BMSD	Soil		1.011	0	0	50	49.456	8/22/2013	8/22/2013
13080639-018B	Soil		1.036	0	0	50	48.263	8/22/2013	8/22/2013
13080639-019B	Soil		1.004	0	0	50	49.801	8/22/2013	8/22/2013
N2711a1 8/22/13			0.506	0	0	50	98.814	8/22/2013	8/22/2013

Project: Pilse	en Soil Site, Pilsen, Chicago, IL		BatchID: 71490
Sample ID: IMBS1 8/22/1	3 SampType: MBLK	TestCode: M_ICPMS_S Units: mg/Kg	Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A
Client ID: ZZZZZ	Batch ID: 71490	TestNo: SW6020	Analysis Date: 8/22/2013 SeqNo: 2499232
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	0.202	0.25	J
Sample ID: ILCSS1 8/22/	13 SampType: LCS	TestCode: M_ICPMS_S Units: mg/Kg	Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A
Client ID: ZZZZZ	Batch ID: 71490	TestNo: SW6020	Analysis Date: 8/22/2013 SeqNo: 2499233
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	25.18	0.25 25 0.202	99.9 80 120 0 0
Sample ID: N2711A1 8/22	2/13 SampType: LCS	TestCode: M_ICPMS_S Units: mg/Kg	Prep Date: 8/22/2013 Run ID: ICPMS_130823A
Client ID: ZZZZZ	Batch ID: 71490	TestNo: SW6020	Analysis Date: 8/23/2013 SeqNo: 2500181
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	1399	4.9 1399 0.202	100 85 115 0 0
Sample ID: 13080639-017	7BMS SampType: MS	TestCode: M_ICPMS_S Units: mg/Kg	I-dry Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A
Client ID: PA-499-01(0-	6)-0814 Batch ID: 71490	TestNo: SW6020	Analysis Date: 8/22/2013 SeqNo: 2499237
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	1147	4.9 24.58 1089	235 75 125 0 0 S
Sample ID: 13080639-017	7BMSD SampType: MSD	TestCode: M_ICPMS_S Units: mg/Kg-	I-dry Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A
Client ID: PA-499-01(0-	6)-0814 Batch ID: 71490	TestNo: SW6020	Analysis Date: 8/22/2013 SeqNo: 2499238
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	1164	4.9 24.73 1089	303 75 125 1147 1.49 20 S

Weston Solutions 13080639

ANALYTICAL QC SUMMARY REPORT

Qualifiers:

CLIENT:

Work Order:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank E - Value above quantitation range

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

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PREP BATCH REPORT

Prep Start Date:	8/22/2013 1:10:52 P
Prep End Date:	8/22/2013 4:35:00 P

Prep Batch 71493	Prep C	ode: M_S _	_ PREP Te	chnician: VA	Prep Factor Units: mL / g						
Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd		
IMBS2 8/22/13			1	0	0	50	50.000	8/22/2013	8/22/2013		

IMBS2 8/22/13		1	0	0	50	50.000	8/22/2013	8/22/2013
ILCSS2 8/22/13		1	0	0	50	50.000	8/22/2013	8/22/2013
13080639-020B	Soil	0.774	0	0	50	64.599	8/22/2013	8/22/2013
13080639-021B	Soil	0.904	0	0	50	55.310	8/22/2013	8/22/2013
13080639-022B	Soil	0.872	0	0	50	57.339	8/22/2013	8/22/2013
13080639-023B	Soil	0.856	0	0	50	58.411	8/22/2013	8/22/2013
13080639-024B	Soil	1.048	0	0	50	47.710	8/22/2013	8/22/2013
13080639-025B	Soil	0.979	0	0	50	51.073	8/22/2013	8/22/2013
13080639-026B	Soil	0.974	0	0	50	51.335	8/22/2013	8/22/2013
13080639-027B	Soil	0.951	0	0	50	52.576	8/22/2013	8/22/2013
13080639-028B	Soil	1.035	0	0	50	48.309	8/22/2013	8/22/2013
13080639-029B	Soil	1.07	0	0	50	46.729	8/22/2013	8/22/2013
13080639-030B	Soil	1.048	0	0	50	47.710	8/22/2013	8/22/2013
13080639-031B	Soil	1.142	0	0	50	43.783	8/22/2013	8/22/2013
13080639-032B	Soil	1.027	0	0	50	48.685	8/22/2013	8/22/2013
13080639-033B	Soil	1.05	0	0	50	47.619	8/22/2013	8/22/2013
13080639-034B	Soil	1.093	0	0	50	45.746	8/22/2013	8/22/2013
13080639-035B	Soil	1.085	0	0	50	46.083	8/22/2013	8/22/2013
13080639-036B	Soil	1.061	0	0	50	47.125	8/22/2013	8/22/2013
13080639-037B	Soil	1.049	0	0	50	47.664	8/22/2013	8/22/2013
13080639-040B	Soil	1.03	0	0	50	48.544	8/22/2013	8/22/2013
13080639-040BMS	Soil	1.033	0	0	50	48.403	8/22/2013	8/22/2013
13080639-040BMSD	Soil	1.033	0	0	50	48.403	8/22/2013	8/22/2013
N2711a2 8/22/13		0.507	0	0	50	98.619	8/22/2013	8/22/2013

Project:	Pilsen Soil S	Site, Pilsen, Chicago, IL							В	atchID: 7	71493		
Sample ID: IMB	S2 8/22/13	SampType: MBLK	TestCo	de: M_ICPMS	_S Unite	: mg/Kg		Prep Dat	te: 8/22/20	13	Run ID: ICI	PMS_130822	A
Client ID: ZZZ	ZZ	Batch ID: 71493	Test	lo: SW6020				Analysis Dat	te: 8/22/20	13	SeqNo: 24	99726	
Analyte		Result	PQL	SPK value	SPK Ref	Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		0.191	0.25										J
Sample ID: ILCS	SS2 8/22/13	SampType: LCS	TestCo	de: M_ICPMS	S Unite	: mg/Kg		Prep Dat	te: 8/22/20	13	Run ID: ICI	PMS_130822	Α
Client ID: ZZZ	ZZ	Batch ID: 71493	Test	lo: SW6020				Analysis Dat	te: 8/22/20	13	SeqNo: 24	99727	
Analyte		Result	PQL	SPK value	SPK Ref	Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		25.82	0.25	25	0.	191	102	80	120	0	0		
Sample ID: N27	11A2 8/22/13	SampType: LCS	TestCo	de: M_ICPMS	S Unite	s: mg/Kg		Prep Dat	te: 8/22/20	13	Run ID: ICI	PMS_130822	Α
Client ID: ZZZ	ZZ	Batch ID: 71493	Test	lo: SW6020				Analysis Dat	te: 8/22/20	13	SeqNo: 24	99728	
Analyte		Result	PQL	SPK value	SPK Ref	Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		1317	4.9	1400	0.	191	94	85	115	0	0		
Sample ID: 1308	80639-040BMS	SampType: MS	TestCo	de: M_ICPMS	S Unite	: mg/Kg-	dry	Prep Dat	te: 8/22/20	13	Run ID: ICI	PMS_130822	Α
Client ID: PA-	515-01(0-6)-0816	Batch ID: 71493	Test	lo: SW6020				Analysis Dat	te: 8/22/20	13	SeqNo: 24	99733	
Analyte		Result	PQL	SPK value	SPK Ref	Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		2011	4.8	24.2	1	639	1530	75	125	0	0		S
Sample ID: 1308	80639-040BMSD	SampType: MSD	TestCo	de: M_ICPMS	_S Units	∷ mg/Kg·	dry	Prep Dat	te: 8/22/20	13	Run ID: ICI	PMS_130822	A
Client ID: PA-	515-01(0-6)-0816	Batch ID: 71493	Test	lo: SW6020				Analysis Dat	te: 8/22/20	13	SeqNo: 24	99734	
Analyte		Result	PQL	SPK value	SPK Ref	Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		2111	4.8	24.2	1	639	1950	75	125	2011	4.86	20	S

Qualifiers:

CLIENT:

Work Order:

Weston Solutions

13080639

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

ANALYTICAL QC SUMMARY REPORT

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

PREP BATCH REPORT

	22/2013 1:1 2/22/2013 4:3 Prep C	5:00 P	_ PREP Te	chnician: VA		Ρ	rep Factor L mL / g	Inits:	
Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
IMBS3 8/22/13			1	0	0	50	50.000	8/22/2013	8/22/2013
ILCSS3 8/22/13			1	0	0	50	50.000	8/22/2013	8/22/2013
13080639-038B	Soil		1.134	0	0	50	44.092	8/22/2013	8/22/2013
13080639-039B	Soil		1.061	0	0	50	47.125	8/22/2013	8/22/2013
13080639-041B	Soil		1.014	0	0	50	49.310	8/22/2013	8/22/2013
13080639-042B	Soil		1.002	0	0	50	49.900	8/22/2013	8/22/2013
13080639-043B	Soil		1.005	0	0	50	49.751	8/22/2013	8/22/2013
13080639-043BMS	Soil		1.042	0	0	50	47.985	8/22/2013	8/22/2013
13080639-043BMSD	Soil		1.045	0	0	50	47.847	8/22/2013	8/22/2013
N2711a3 8/22/13			0.504	0	0	50	99.206	8/22/2013	8/22/2013

Project: Pilsen Soil S	Site, Pilsen, Chicago, IL		BatchID: 71494
Sample ID: IMBS3 8/22/13 Client ID: ZZZZZ	SampType: MBLK Batch ID: 71494	TestCode: M_ICPMS_S Units: mg/Kg TestNo: SW6020	Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A Analysis Date: 8/22/2013 SeqNo: 2499267
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	0.132	0.25	J
Sample ID: ILCSS3 8/22/13 Client ID: ZZZZZ	SampType: LCS Batch ID: 71494	TestCode: M_ICPMS_S Units: mg/Kg TestNo: SW6020	Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A Analysis Date: 8/22/2013 SeqNo: 2499268
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	24.96	0.25 25 0.132	99.3 80 120 0 0
Sample ID: N2711A3 8/22/13 Client ID: ZZZZZ	SampType: LCS Batch ID: 71494	TestCode: M_ICPMS_S Units: mg/Kg TestNo: SW6020	Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A Analysis Date: 8/22/2013 SeqNo: 2499269
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	1583	5.0 1401 0.132	113 85 115 0 0
Sample ID: 13080639-043BMS Client ID: PA-516-01(6-18)-081	SampType: MS Batch ID: 71494	TestCode: M_ICPMS_S Units: mg/Kg-c TestNo: SW6020	dry Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A Analysis Date: 8/22/2013 SeqNo: 2499272
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	793.5	5.0 25 738	222 75 125 0 0 S
Sample ID: 13080639-043BMSD Client ID: PA-516-01(6-18)-081		TestCode: M_ICPMS_S Units: mg/Kg-c TestNo: SW6020	dry Prep Date: 8/22/2013 Run ID: ICPMS-2_130822A Analysis Date: 8/22/2013 SeqNo: 2499273
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	784	5.0 25 738	184 75 125 793.5 1.20 20 S

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded E - Value above quantitation range

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ANALYTICAL QC SUMMARY REPORT

CLIENT: Weston Solutions Work Order: 13080639

PREP BATCH REPORT

 Prep Start Date:
 8/19/2013 6:57:00 P

 Prep End Date:
 8/19/2013 7:35:00 P

Prep Batch 71402 Prep Code: M_HG_S_PRE Technician: LB

Prep Factor Units: mL / g

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
HGMBS1 8/19/13			0.3	0	0	30	100.000	8/19/2013	8/19/2013
HGLCSS1 8/19/13			0.3	0	0	30	100.000	8/19/2013	8/19/2013
13080538-003B	Soil		0.324	0	0	30	92.593	8/19/2013	8/19/2013
13080538-005B	Soil		0.326	0	0	30	92.025	8/19/2013	8/19/2013
13080538-006B	Soil		0.309	0	0	30	97.087	8/19/2013	8/19/2013
13080538-008A	Soil		0.312	0	0	30	96.154	8/19/2013	8/19/2013
13080538-009A	Soil		0.306	0	0	30	98.039	8/19/2013	8/19/2013
13080538-010B	Soil		0.309	0	0	30	97.087	8/19/2013	8/19/2013
13080598-001A	Solid		0.305	0	0	30	98.361	8/19/2013	8/19/2013
13080598-002A	Solid		0.325	0	0	30	92.308	8/19/2013	8/19/2013
13080598-003A	Solid		0.322	0	0	30	93.168	8/19/2013	8/19/2013
13080598-004A	Solid		0.321	0	0	30	93.458	8/19/2013	8/19/2013
13080598-002AMS	Solid		0.321	0	0	30	93.458	8/19/2013	8/19/2013
13080598-002AMSD	Solid		0.325	0	0	30	92.308	8/19/2013	8/19/2013
13080639-001A	Soil		0.322	0	0	30	93.168	8/19/2013	8/19/2013
13080639-002A	Soil		0.321	0	0	30	93.458	8/19/2013	8/19/2013
13080639-003A	Soil		0.377	0	0	30	79.576	8/19/2013	8/19/2013
13080639-004A	Soil		0.3	0	0	30	100.000	8/19/2013	8/19/2013
13080639-005A	Soil		0.319	0	0	30	94.044	8/19/2013	8/19/2013
13080639-006A	Soil		0.336	0	0	30	89.286	8/19/2013	8/19/2013
13080639-007A	Soil		0.373	0	0	30	80.429	8/19/2013	8/19/2013
13080639-008A	Soil		0.34	0	0	30	88.235	8/19/2013	8/19/2013
13080639-009A	Soil		0.32	0	0	30	93.750	8/19/2013	8/19/2013
13080677-001A	Soil		0.344	0	0	30	87.209	8/19/2013	8/19/2013

CLIENT: Weston Solutions Work Order: 13080639

Pilsen Soil Site, Pilsen, Chicago, IL

Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: 71402

Sample ID	HGMBS1 8/19/13	SampType: MBLK	TestCoo	de: M_HG_SC	DLI Units: mg/Kg		Prep Date	e: 8/19/2	013	Run ID: CE	TAC_13082	A
Client ID:	ZZZZZ	Batch ID: 71402	TestN	lo: SW7471A			Analysis Date	e: 8/20/2	013	SeqNo: 24	96954	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit I	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		ND	0.020									
Sample ID	HGLCSS1 8/19/13	SampType: LCS	TestCoo	le: M_HG_SC	DLI Units: mg/Kg		Prep Date	e: 8/19/2	013	Run ID: CE	TAC_13082)A
Client ID:	ZZZZZ	Batch ID: 71402	TestN	lo: SW7471A			Analysis Date	e: 8/20/2	013	SeqNo: 24	96955	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit I	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.227	0.020	0.25	0	90.8	80	120	0	0		
Sample ID	13080598-002AMS	SampType: MS	TestCoo	de: M_HG_SC	DLI Units: mg/Kg	-dry	Prep Date	e: 8/19/2	013	Run ID: CE	TAC_13082)B
Client ID:	ZZZZZ	Batch ID: 71402	TestN	lo: SW7471A			Analysis Date	e: 8/20/2	013	SeqNo: 24	97016	
Client ID: Analyte	ZZZZZ	Batch ID: 71402 Result	TestN PQL		SPK Ref Val	%REC	Analysis Date			SeqNo: 24 %RPD	97016 RPDLimit	Qual
	ZZZZZ					%REC 132	,					Qual S
Analyte Mercury		Result 2.44	PQL 0.10	SPK value	SPK Ref Val 2.102	132	LowLimit I	HighLimit 125	RPD Ref Val	, %RPD 0		S
Analyte Mercury		Result 2.44	PQL 0.10 TestCoo	SPK value 0.2552	SPK Ref Val 2.102 DLI Units: mg/Kg	132	LowLimit I 75	HighLimit 125 e: 8/19/2	RPD Ref Val 0 013	, %RPD 0	RPDLimit	S
Analyte Mercury Sample ID	13080598-002AMSD	Result 2.44 SampType: MSD	PQL 0.10 TestCoo	SPK value 0.2552 de: M_HG_SC lo: SW7471A	SPK Ref Val 2.102 DLI Units: mg/Kg	132	LowLimit I 75 Prep Date	HighLimit 125 2: 8/19/2 2: 8/20/2	RPD Ref Val 0 013 013	%RPD 0 Run ID: CE	RPDLimit	S

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Non Accredited Parameter

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PREP BATCH REPORT

Prep Factor Units:

mL/g

 Prep Start Date:
 8/20/2013 5:07:00 P

 Prep End Date:
 8/20/2013 5:45:00 P

Prep Batch 71452 Prep Code: M_HG_S_PRE Technician: LB

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
HGMBS1 8/20/13			0.3	0	0	30	100.000	8/20/2013	8/20/2013
HGLCSS1 8/20/13			0.3	0	0	30	100.000	8/20/2013	8/20/2013
13080692-001A	Soil		0.315	0	0	30	95.238	8/20/2013	8/20/2013
13080639-010A	Soil		0.315	0	0	30	95.238	8/20/2013	8/20/2013
13080639-011A	Soil		0.365	0	0	30	82.192	8/20/2013	8/20/2013
13080639-012A	Soil		0.32	0	0	30	93.750	8/20/2013	8/20/2013
13080639-013A	Soil		0.314	0	0	30	95.541	8/20/2013	8/20/2013
13080639-014A	Soil		0.345	0	0	30	86.957	8/20/2013	8/20/2013
13080639-015A	Soil		0.35	0	0	30	85.714	8/20/2013	8/20/2013
13080639-016A	Soil		0.352	0	0	30	85.227	8/20/2013	8/20/2013
13080639-017A	Soil		0.335	0	0	30	89.552	8/20/2013	8/20/2013
13080639-017AMS	Soil		0.344	0	0	30	87.209	8/20/2013	8/20/2013
13080639-017AMSD	Soil		0.341	0	0	30	87.977	8/20/2013	8/20/2013
13080639-018A	Soil		0.318	0	0	30	94.340	8/20/2013	8/20/2013
13080639-019A	Soil		0.342	0	0	30	87.719	8/20/2013	8/20/2013
13080639-020A	Soil		0.33	0	0	30	90.909	8/20/2013	8/20/2013
13080639-021A	Soil		0.36	0	0	30	83.333	8/20/2013	8/20/2013
13080639-022A	Soil		0.306	0	0	30	98.039	8/20/2013	8/20/2013
13080639-023A	Soil		0.304	0	0	30	98.684	8/20/2013	8/20/2013
13080639-024A	Soil		0.333	0	0	30	90.090	8/20/2013	8/20/2013
13080639-025A	Soil		0.306	0	0	30	98.039	8/20/2013	8/20/2013
13080639-026A	Soil		0.312	0	0	30	96.154	8/20/2013	8/20/2013
13080639-027A	Soil		0.3	0	0	30	100.000	8/20/2013	8/20/2013
13080639-028A	Soil		0.326	0	0	30	92.025	8/20/2013	8/20/2013

CLIENT: Weston Solutions

Work Order: 13080639

Project: Pilsen Soil Site, Pilsen, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 71452

Sample ID	HGMBS1 8/20/13	SampType:	MBLK	TestCod	le: M_HG_SC	DLI Units: mg/Kg		Prep Date	e: 8/20/2	013	Run ID: CE	TAC_13082	1A
Client ID:	ZZZZZ	Batch ID:	71452	TestN	lo: SW7471A			Analysis Dat	e: 8/21/2	013	SeqNo: 24	97895	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			ND	0.020									
Sample ID	HGLCSS1 8/20/13	SampType:	LCS	TestCod	le: M_HG_SC	DLI Units: mg/Kg		Prep Date	e: 8/20/2	013	Run ID: CE	TAC_13082	1A
Client ID:	ZZZZZ	Batch ID:	71452	TestN	lo: SW7471A	L.		Analysis Dat	e: 8/21/2	013	SeqNo: 24	97896	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			0.228	0.020	0.25	0	91.2	80	120	0	0		
Sample ID	13080639-017AMS	SampType:	MS	TestCod	le: M_HG_S (DLI Units: mg/Kg	J-dry	Prep Date	e: 8/20/2	013	Run ID: CE	TAC_13082	1F
Sample ID Client ID:	13080639-017AMS PA-499-01(0-6)-0814	SampType: Batch ID:			le: M_HG_SC	0 0		Prep Date Analysis Date			Run ID: CE SeqNo: 24		1F
					lo: SW7471A	0 0		•	e: 8/21/2	013			1F Qual
Client ID:			71452	TestN	lo: SW7471A			Analysis Dat	e: 8/21/2	013	SeqNo: 24	98271	
Client ID: Analyte	PA-499-01(0-6)-0814	Batch ID:	71452 Result 0.7998	TestN PQL 0.041	lo: SW7471A	SPK Ref Val	%REC 58.9	Analysis Dat LowLimit 75	e: 8/21/2 HighLimit	013 RPD Ref Val 0	SeqNo: 24 %RPD 0	98271	Qual S
Client ID: Analyte Mercury	PA-499-01(0-6)-0814	Batch ID:	71452 Result 0.7998 MSD	TestN PQL 0.041 TestCod	lo: SW7471A SPK value 0.2544	SPK Ref Val 0.65 DLI Units: mg/Kg	%REC 58.9	Analysis Dat LowLimit 75	e: 8/21/2 HighLimit 125 e: 8/20/2	013 RPD Ref Val 0 013	SeqNo: 24 %RPD 0	98271 RPDLimit	Qual S
Client ID: Analyte Mercury Sample ID	PA-499-01(0-6)-0814 13080639-017AMSD	Batch ID:	71452 Result 0.7998 MSD	TestN PQL 0.041 TestCod	lo: SW7471A SPK value 0.2544 le: M_HG_S(lo: SW7471A	SPK Ref Val 0.65 DLI Units: mg/Kg	%REC 58.9	Analysis Date LowLimit 75 Prep Date	e: 8/21/2 HighLimit 125 e: 8/20/2 e: 8/21/2	013 RPD Ref Val 0 013 013	SeqNo: 24 %RPD 0 Run ID: CE	98271 RPDLimit	Qual S

* - Non Accredited Parameter

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

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PREP BATCH REPORT

 Prep Start Date:
 8/20/2013 6:16:00 P

 Prep End Date:
 8/20/2013 6:57:00 P

Prep Batch 71461 Prep Code: M_HG_S_PRE Technician: LB

Prep Factor Units: mL / g

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
HGMBS2 8/20/13			0.3	0	0	30	100.000	8/20/2013	8/20/2013
HGLCSS2 8/20/13			0.3	0	0	30	100.000	8/20/2013	8/20/2013
13080639-029A	Soil		0.338	0	0	30	88.757	8/20/2013	8/20/2013
13080639-030A	Soil		0.348	0	0	30	86.207	8/20/2013	8/20/2013
13080639-031A	Soil		0.327	0	0	30	91.743	8/20/2013	8/20/2013
13080639-032A	Soil		0.3	0	0	30	100.000	8/20/2013	8/20/2013
13080639-033A	Soil		0.308	0	0	30	97.403	8/20/2013	8/20/2013
13080639-034A	Soil		0.332	0	0	30	90.361	8/20/2013	8/20/2013
13080639-035A	Soil		0.361	0	0	30	83.102	8/20/2013	8/20/2013
13080639-036A	Soil		0.338	0	0	30	88.757	8/20/2013	8/20/2013
13080639-037A	Soil		0.303	0	0	30	99.010	8/20/2013	8/20/2013
13080639-038A	Soil		0.304	0	0	30	98.684	8/20/2013	8/20/2013
13080639-039A	Soil		0.395	0	0	30	75.949	8/20/2013	8/20/2013
13080639-040A	Soil		0.387	0	0	30	77.519	8/20/2013	8/20/2013
13080639-040AMS	Soil		0.388	0	0	30	77.320	8/20/2013	8/20/2013
13080639-040AMSD	Soil		0.389	0	0	30	77.121	8/20/2013	8/20/2013
13080639-041A	Soil		0.305	0	0	30	98.361	8/20/2013	8/20/2013
13080639-042A	Soil		0.359	0	0	30	83.565	8/20/2013	8/20/2013
13080643-001A	Solid		0.348	0	0	30	86.207	8/20/2013	8/20/2013
13080643-002A	Solid		0.39	0	0	30	76.923	8/20/2013	8/20/2013
13080643-003A	Solid		0.318	0	0	30	94.340	8/20/2013	8/20/2013
13080643-004A	Solid		0.359	0	0	30	83.565	8/20/2013	8/20/2013
13080681-001B	Soil		0.307	0	0	30	97.720	8/20/2013	8/20/2013
13080682-001A	Soil		0.322	0	0	30	93.168	8/20/2013	8/20/2013

Work Order: 13080639

Project: Pilsen Soil Site, Pilsen, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 71461

Sample ID	HGMBS2 8/20/13	SampType:	MBLK	TestCoc	le: M_HG_SO	OLI Units: mg/Kg		Prep Date	e: 8/20/2	013	Run ID: CE	ETAC_13082	1F
Client ID:	ZZZZZ	Batch ID:	71461	TestN	lo: SW7471A	N		Analysis Date	e: 8/21/2	013	SeqNo: 24	98232	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			ND	0.020									
Sample ID	HGLCSS2 8/20/13	SampType:	LCS	TestCoc	le: M_HG_SO	OLI Units: mg/Kg		Prep Date	e: 8/20/2	013	Run ID: CE	ETAC_13082	1F
Client ID:	ZZZZZ	Batch ID:	71461	TestN	lo: SW7471A	۱.		Analysis Date	e: 8/21/2	013	SeqNo: 24	98233	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			0.226	0.020	0.25	0	90.4	80	120	0	0		
Sample ID	13080639-040AMS	SampType:	MS	TestCoc	le: M_HG_S	DLI Units: mg/Kg	J-dry	Prep Date	e: 8/20/2	013	Run ID: CE	ETAC_13082	1F
Sample ID Client ID:	13080639-040AMS PA-515-01(0-6)-0816	1 71			le: M_HG_S0 lo: SW7471A	0 0	J-dry	Prep Date Analysis Date			Run ID: CE SeqNo: 24		1F
		1 21					J-dry %REC	Analysis Date	e: 8/21/2				1F Qual
Client ID:		1 21	71461	TestN	lo: SW7471A		-	Analysis Date	e: 8/21/2	013	SeqNo: 24	98276	
Client ID: Analyte	PA-515-01(0-6)-0816	Batch ID:	71461 Result 1.047	TestN PQL 0.096	lo: SW7471A	SPK Ref Val 0.8863	%REC 67	Analysis Date	e: 8/21/2 HighLimit 125	013 RPD Ref Val 0	SeqNo: 24 %RPD 0	98276	Qual S
Client ID: Analyte Mercury	PA-515-01(0-6)-0816	Batch ID:	71461 Result 1.047 MSD	TestN PQL 0.096 TestCoo	lo: SW7471A SPK value 0.2389	SPK Ref Val 0.8863 DLI Units: mg/Kg	%REC 67	Analysis Date LowLimit 75	e: 8/21/2 HighLimit 125 e: 8/20/2	013 RPD Ref Val 0 013	SeqNo: 24 %RPD 0	98276 RPDLimit TAC_13082	Qual S
Client ID: Analyte Mercury Sample ID	PA-515-01(0-6)-0816 13080639-040AMSD	Batch ID:	71461 Result 1.047 MSD	TestN PQL 0.096 TestCoo	lo: SW7471A SPK value 0.2389 le: M_HG_S(lo: SW7471A	SPK Ref Val 0.8863 DLI Units: mg/Kg	%REC 67	Analysis Date LowLimit 75 Prep Date Analysis Date	e: 8/21/2 HighLimit 125 e: 8/20/2 e: 8/21/2	013 RPD Ref Val 0 013	SeqNo: 24 %RPD 0 Run ID: CE	98276 RPDLimit TAC_13082	Qual S

Qualifiers:

* - Non Accredited Parameter

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded B - Analyte detected in the associated Method Blank

E - Value above quantitation range

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STAT Analysis Corporation

PREP BATCH REPORT

 Prep Start Date:
 8/20/2013 6:30:00 P

 Prep End Date:
 8/20/2013 7:09:00 P

Prep Batch 71462 Prep Code: M_HG_S_PRE Technician: LB

Prep Factor Units:

mL/g

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
HGMBS3 8/20/13			0.3	0	0	30	100.000	8/20/2013	8/20/2013
HGLCSS3 8/20/13			0.3	0	0	30	100.000	8/20/2013	8/20/2013
13080634-001B	Soil		0.326	0	0	30	92.025	8/20/2013	8/20/2013
13080634-002B	Soil		0.348	0	0	30	86.207	8/20/2013	8/20/2013
13080634-003B	Soil		0.312	0	0	30	96.154	8/20/2013	8/20/2013
13080634-004B	Soil		0.37	0	0	30	81.081	8/20/2013	8/20/2013
13080634-005B	Soil		0.309	0	0	30	97.087	8/20/2013	8/20/2013
13080634-006B	Soil		0.326	0	0	30	92.025	8/20/2013	8/20/2013
13080634-007B	Soil		0.388	0	0	30	77.320	8/20/2013	8/20/2013
13080634-008B	Soil		0.324	0	0	30	92.593	8/20/2013	8/20/2013
13080634-009B	Soil		0.347	0	0	30	86.455	8/20/2013	8/20/2013
13080634-010B	Soil		0.365	0	0	30	82.192	8/20/2013	8/20/2013
13080634-011B	Soil		0.304	0	0	30	98.684	8/20/2013	8/20/2013
13080634-012B	Soil		0.336	0	0	30	89.286	8/20/2013	8/20/2013
13080634-013B	Soil		0.305	0	0	30	98.361	8/20/2013	8/20/2013
13080634-014B	Soil		0.319	0	0	30	94.044	8/20/2013	8/20/2013
13080634-015B	Soil		0.304	0	0	30	98.684	8/20/2013	8/20/2013
13080634-016B	Soil		0.31	0	0	30	96.774	8/20/2013	8/20/2013
13080634-017B	Soil		0.375	0	0	30	80.000	8/20/2013	8/20/2013
13080634-018B	Soil		0.337	0	0	30	89.021	8/20/2013	8/20/2013
13080634-019B	Soil		0.317	0	0	30	94.637	8/20/2013	8/20/2013
13080639-043A	Soil		0.331	0	0	30	90.634	8/20/2013	8/20/2013
13080639-043AMS	Soil		0.328	0	0	30	91.463	8/20/2013	8/20/2013
13080639-043AMSD	Soil		0.327	0	0	30	91.743	8/20/2013	8/20/2013

Work Order: 13080639

Project: Pilsen Soil Site, Pilsen, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 71462

Sample ID	HGMBS3 8/20/13	SampType:	MBLK	TestCod	e: M_HG_SC	OLI Units: mg/Kg		Prep Date	e: 8/20/2	013	Run ID: CI	ETAC_13082	1F
Client ID:	ZZZZZ	Batch ID:	71462	TestN	o: SW7471A			Analysis Dat	e: 8/21/2	013	SeqNo: 24	98252	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			ND	0.020									
Sample ID	HGLCSS3 8/20/13	SampType:	LCS	TestCod	e: M_HG_SC	DLI Units: mg/Kg		Prep Date	e: 8/20/2	013	Run ID: CI	ETAC_13082	1F
Client ID:	ZZZZZ	Batch ID:	71462	TestN	o: SW7471A			Analysis Dat	e: 8/21/2	013	SeqNo: 24	98253	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			0.227	0.020	0.25	0	90.8	80	120	0	0		
Sample ID	13080639-043AMS	SampType:	MS	TestCod	e: M_HG_SC	DLI Units: mg/Kg	-dry	Prep Date	e: 8/20/2	013	Run ID: CI	ETAC_13082	1F
Client ID:	PA-516-01(6-18)-081	Batch ID:	71462	TestN	o: SW7471A			Analysis Dat	e: 8/21/2	013	SeqNo: 24	98257	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte Mercury			Result 0.7737	PQL 0.023	SPK value 0.2819	SPK Ref Val 0.4873	%REC 102	LowLimit 75	HighLimit 125	RPD Ref Val	%RPD 0	RPDLimit	Qual
	13080639-043AMSD	SampType:	0.7737	0.023		0.4873	102		125	0	0	RPDLimit	
Mercury	13080639-043AMSD PA-516-01(6-18)-081	1 21	0.7737 MSD	0.023 TestCod	0.2819	0.4873	102	75	125 e: 8/20/2	0 013	0	ETAC_13082	
Mercury Sample ID		1 21	0.7737 MSD	0.023 TestCod	0.2819 e: M_HG_SC o: SW7471A	0.4873 DLI Units: mg/Kg	102	75 Prep Date Analysis Dat	125 e: 8/20/2 e: 8/21/2	0 013	0 Run ID: CI	ETAC_13082	

Qualifiers:	ND
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- Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

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Work Order: 13080639

Pilsen Soil Site, Pilsen, Chicago, IL **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: R92317

Sample ID	PMMBK 1 8/20/13	SampType:		TestCod	e: PMOIST	Units: wt%		Prep Date:	8/20/20	113	Run ID: BA	ALANCE_130	8200
•								•				_	0200
Client ID:	ZZZZZ	Batch ID:	R92317	TestN	o: D2974			Analysis Date:	8/20/20	013	SeqNo: 24	97375	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	pisture		ND	0.200									*
Sample ID	PMLCS-S 1 8/20/13	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date:	8/20/20	013	Run ID: BA	LANCE_130	820C
Client ID:	ZZZZZ	Batch ID:	R92317	TestN	o: D2974			Analysis Date:	8/20/20	013	SeqNo: 24	97377	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	bisture		4.82	0.200	5	0	96.4	80	120	0	0		*
Sample ID	PMLCS-W 1 8/20/13	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date:	8/20/20	013	Run ID: BA	LANCE_130	820C
Client ID:	ZZZZZ	Batch ID:	R92317	TestN	o: D2974			Analysis Date:	8/20/20	013	SeqNo: 24	97379	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	pisture		99.79	0.200	99.8	0	100	80	120	0	0		*
Sample ID	13080634-018B DUP	SampType:	DUP	TestCod	e: PMOIST	Units: wt%		Prep Date:	8/20/20	013	Run ID: BA	LANCE_130	820C
Client ID:	ZZZZZ	Batch ID:	R92317	TestN	o: D2974			Analysis Date:	8/20/20	013	SeqNo: 24	97387	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	pisture		14.94	0.200	0	0	0	0	0	12.72	16.1	20	*

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits * - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

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Work Order: 13080639

Project: Pilsen Soil Site, Pilsen, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R92320

Sample ID PM	IMBK 2 8/20/13	SampType:	MBLK	TestCod	e: PMOIST	Units: wt%		Prep Date:	8/20/20	013	Run ID: BA	ALANCE_130	0820D
Client ID: ZZZ	ZZZ	Batch ID:	R92320	TestN	o: D2974			Analysis Date	: 8/20/20	013	SeqNo: 24	97484	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moistur	ire		ND	0.200									*
Sample ID PM	ILCS-S 2 8/20/13	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date:	8/20/20	013	Run ID: BA	LANCE_13	0820D
Client ID: ZZZ	ZZZ	Batch ID:	R92320	TestN	o: D2974			Analysis Date	: 8/20/20	013	SeqNo: 24	97485	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moistur	ire		4.89	0.200	5	0	97.8	80	120	0	0		*
Sample ID PM	ILCS-W 2 8/20/13	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date:	8/20/20	013	Run ID: BA	ALANCE_130	0820D
	ILCS-W 2 8/20/13 ZZZ	1 31	LCS R92320		e: PMOIST o: D2974	Units: wt%		Prep Date: Analysis Date			Run ID: B/ SeqNo: 24	—)820D
		1 21			o: D2974	Units: wt% SPK Ref Val	%REC		: 8/20/20	013		—	0820D Qual
Client ID: ZZZ	ZZZ	1 21	R92320	TestN	o: D2974			Analysis Date	: 8/20/20	013	SeqNo: 24	97486 	
Client ID: ZZZ Analyte Percent Moistur	ZZZ	Batch ID:	R92320 Result 99.81	TestN PQL 0.200	o: D2974 SPK value	SPK Ref Val	%REC	Analysis Date	: 8/20/20 HighLimit 120	013 RPD Ref Val 0	SeqNo: 24 %RPD 0	97486 	Qual *
Client ID: ZZZ Analyte Percent Moistur Sample ID 130	zzz	Batch ID:	R92320 Result 99.81 DUP	TestN PQL 0.200 TestCod	o: D2974 SPK value 99.8	SPK Ref Val	%REC 100	Analysis Date LowLimit F 80	: 8/20/20 HighLimit 120 : 8/20/20	013 RPD Ref Val 0 013	SeqNo: 24 %RPD 0	97486 RPDLimit	Qual *
Client ID: ZZZ Analyte Percent Moistur Sample ID 130	ZZZ Ire 080639-017A DUP	Batch ID:	R92320 Result 99.81 DUP	TestN PQL 0.200 TestCod	o: D2974 SPK value 99.8 e: PMOIST o: D2974	SPK Ref Val	%REC 100	Analysis Date LowLimit H 80 Prep Date:	: 8/20/20 HighLimit 120 : 8/20/20 : 8/20/20	013 RPD Ref Val 0 013 013	SeqNo: 24 %RPD 0 Run ID: B/	97486 RPDLimit	Qual *

Qualifiers:

ND - Not Detected at the Reporting Limit

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* - Non Accredited Parameter

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B - Analyte detected in the associated Method Blank

E - Value above quantitation range

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Work Order:

13080639

Project: Pilsen Soil Site, Pilsen, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R92324

Sample ID	PMMBK 3 8/20/13 ZZZZZ	SampType:			e: PMOIST	Units: wt%		Prep Date				LANCE_130	820E
Client ID:		Batch ID:	R92324		o: D2974			Analysis Date			SeqNo: 24		
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	oisture		ND	0.200									*
Sample ID	PMLCS-S 3 8/20/13	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date	e: 8/20/2	013	Run ID: BA	LANCE_130	820E
Client ID:	ZZZZZ	Batch ID:	R92324	TestN	o: D2974			Analysis Date	e: 8/20/2	013	SeqNo: 24	97609	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Me	oisture		5.68	0.200	5	0	114	80	120	0	0		*
Sample ID	PMLCS-W 3 8/20/13	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date	e: 8/20/2	013	Run ID: BA	LANCE_130	820E
Sample ID Client ID:	PMLCS-W 3 8/20/13 ZZZZZ				e: PMOIST o: D2974	Units: wt%		Prep Date Analysis Date			Run ID: B A SeqNo: 24	_)820E
							%REC	Analysis Date	e: 8/20/2			_	0820E Qual
Client ID:	ZZZZZ		R92324	TestN	o: D2974			Analysis Date	e: 8/20/2	013	SeqNo: 24	97610	
Client ID: Analyte	ZZZZZ oisture	Batch ID:	R92324 Result 99.77	TestN PQL 0.200	o: D2974 SPK value	SPK Ref Val	%REC	Analysis Date	e: 8/20/2 HighLimit 120	013 RPD Ref Val	SeqNo: 24 %RPD 0	97610	Qual *
Client ID: Analyte Percent Mo	oisture	Batch ID:	R92324 Result 99.77	TestN PQL 0.200 TestCod	o: D2974 SPK value 99.8	SPK Ref Val	%REC 100	Analysis Date LowLimit 80	e: 8/20/2 HighLimit 120 e: 8/20/2	013 RPD Ref Val 0 013	SeqNo: 24 %RPD 0	97610 RPDLimit	Qual *
Client ID: Analyte Percent Mo Sample ID	ZZZZZ oisture 13080639-040A DUP	Batch ID:	R92324 Result 99.77 DUP	TestN PQL 0.200 TestCod	o: D2974 SPK value 99.8 e: PMOIST	SPK Ref Val 0 Units: wt%	%REC 100	Analysis Date LowLimit 80 Prep Date Analysis Date	e: 8/20/2 HighLimit 120 e: 8/20/2 e: 8/20/2	013 RPD Ref Val 0 013	SeqNo: 24 %RPD 0 Run ID: BA	97610 RPDLimit	Qual *

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APPENDIX D EPA FIELDS SUPPLEMENTAL DATA ANALYSIS

Pilsen-Kramer Site Comparison of Abundance of Metals Bar Graph

Linda Jacobson, Research Associate John Canar, Environmental Scientist

24 February 2014

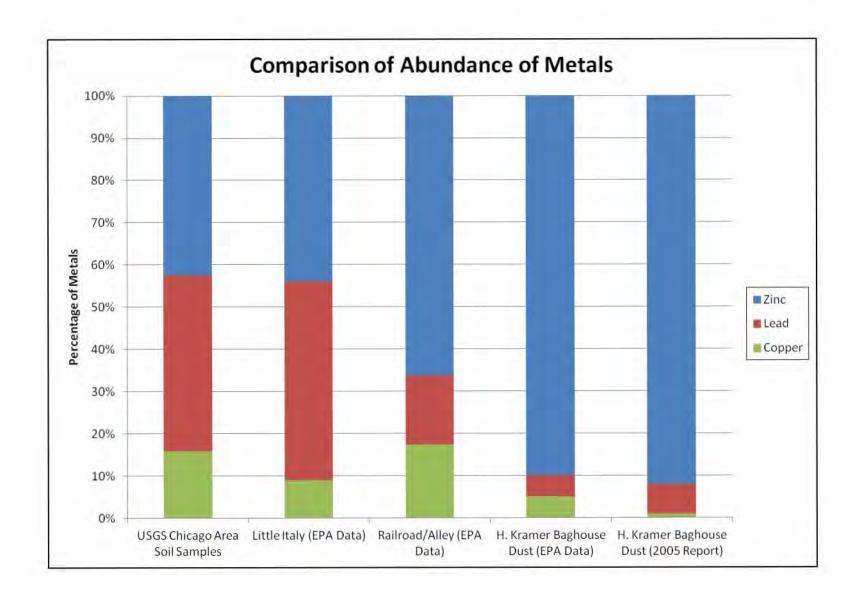
Introduction

Soil samples were collected near the H. Kramer site and surrounding areas by the USGS; the EPA; and Conestoga-Rovers & Associates (CRA) and TRC Environmental Corporation (TRC). The USGS samples were taken in the surrounding area. The EPA samples were taken in 2012 and 2013 and were subset into Little Italy and Railroad/Alley. The samples taken by CRA and TRC were taken at the H. Kramer baghouse and are detailed in the 2005 report (Report to Illinois EPA Regarding Soil Sampling at H. Kramer Co., Inc. and Vicinity.pdf). The EPA also collected samples at the H. Kramer baghouse in 2013. Zinc, Lead, and Copper from these sampling events were compared in this bar graph.

Methods and Analysis

The bar graph (below) shows the percent of Zinc, Lead, and Copper for the samples collected by the USGS in the Chicago area, the samples collected by the EPA in the Little Italy area from 0 to 6 inches, the samples collected by the EPA in the Railroad/Alley area from 0 to 6 inches, the samples taken by the EPA in the H. Kramer baghouse, and the samples taken by CRA and TRC in the H. Kramer baghouse. The percents of metals for the USGS Chicago area samples and the H. Kramer baghouse samples taken by CRA and TRC are from the "Comparison of Abundance of Metals" graph in the 2005 report. For the EPA samples taken in the Little Italy area, the percent of Zinc was obtained by dividing the sum of the Zinc laboratory concentrations in the Little Italy area. This was repeated to obtain the percents of Lead and Copper for the Little Italy area. The Zinc, Lead, and Copper percents were obtained for the EPA samples taken in the Railroad/Alley area and the H. Kramer baghouse using the same method. The percents were graphed in a stacked column graph.

Please contact the FIELDS Group via John Canar (canar.john@epa.gov) about this document.







Pilsen-Kramer Site (Superfund Removal Program) Simple Linear Regression and Diagnostics Results (2012-2013 Sampling Events)

Prepared by John Canar FIELDS Group, US EPA, Region V

29 January 2014

Introduction

Simple linear regression and regression diagnostics were used to find the "best fitting" linear relationship between XRF measurements of Lead levels in soil samples and their corresponding laboratory measurements using the SAS[®] software. This relationship is quantified into a model (equation) of XRF measurements of Lead and its corresponding laboratory measurement. The statistical methods employed were drawn from SAS[®] literature and three regression texts: <u>Statistical Methods in Water Resources</u>, 1992; and <u>Applied Regression Analysis and Other Multivariate Methods</u>, 1978 and 1988. (See "References" section for a complete list of regression resources.) The data set used for this analysis was provided by Weston Solutions, the USEPA contractor for the Pilsen-Kramer Superfund site. The data include all sampling events from and including 2012 and 2013. This site is under the direction of Ramon Mendoza, USEPA OSC.

The steps used to perform simple linear regression were:

- 1. Plot the data;
- 2. Compute the least squares regression statistics;
- 3. Examine adherence to the assumptions of regression using residual plots; and
- 4. Employ regression diagnostics (Helsel and Hirsch, 1992).

Data

A total of 192 soil samples with corresponding XRF values were submitted for laboratory analysis and were used in the below regression.

Results

There was a statistically significant linear regression relationship between XRF Lead values and their corresponding Laboratory values (results not shown). However, regression diagnostics found that some of the assumptions of regression were violated. These violations included extreme residuals, heteroscedasticity, and non-normality of the residuals (see Figures 1 and 2). (The null hypothesis of each of the four tests in Figure 2 is that the residuals are from a normal distribution. If using an alpha value of 0.05, one would not reject the null hypothesis for all four tests.) The heteroscedasticity of the residuals meant that a data transformation would likely overcome this violation of one of the statistical assumptions of regression. Hence, the natural log of the XRF Lead values and their corresponding Laboratory value were taken.

There was a statistically significant linear regression relationship between natural log of XRF Lead values and their corresponding natural log of Laboratory values (results not shown). However, regression diagnostics found that some of the assumptions of regression were violated. These violations included extreme residuals and non-normality of the residuals (see Figures 3 and 4). However, the heteroscedasticity now appears much less apparent. To overcome these violations, four observations with Studentized residual values greater than 2.5, a value used as a rule of thumb for extreme values, were removed from the data set. The new data set was regressed and the linear regression was significant (results not shown). The assumption of a lack of extreme residuals and normality of the residuals was violated (results not shown). One observation with an extreme residual was removed from the data set and the new data set was regressed. The regression results were significant but the assumption of a lack of extreme residuals and normality of the residuals was violated (results not shown). Another observation with an extreme residual was removed, the new dataset was regressed, and again the violations occurred. This was performed four more times until all the assumptions of regression were met. Figure 5 shows the statistically significant linear regression relationship between the natural log of XRF Lead values and their corresponding natural log of Laboratory values. Figures 6 and 7 demonstrate that the assumptions of regression were met. Figure 6 shows that the residuals were homoscedastic and none of the Studentized residuals were greater than 2.5. The White test also found that the variance of the residuals were homogenous (results not shown). Figure 7 shows that the residuals were normally distributed. Normality of residuals is required in order to test the hypothesis that "the slope coefficient (β_1) is significantly different from zero" (Helsel and Hirsch, 1992). In other words, in order to demonstrate a linear relationship between the two variables, XRF and Laboratory, the slope coefficient must be significant. A visualization of the linear relationship between the natural log of Lead XRF and Laboratory values in soil is shown in Figure 8.

The parameters of the best linear fit equation for the relationship of the natural log of Lead XRF and Laboratory values in soil are:

Adjusted LN Lead = 0.37986 + (0.99751)*(LN XRF Lead value)

However, as this equation is in natural log space, the antilog of the adjusted Lead value must be taken. For example, for an XRF Lead reading of 400ppm (5.99ppm in natural log space), the Adjusted LN XRF Lead value is 6.36ppm. The antilog of this value is 576ppm. Hence, an XRF

Lead reading in soil of 400 ppm is equivalent to an adjusted XRF Lead value of 576ppm in soil. For 800ppm, the adjusted value is 1,150ppm; for 1,200ppm, the adjusted value is 1,724ppm.

References:

Chen, X., Ender, P., Mitchell, M. and Wells, C. (2003). Regression with SAS, from http://www.ats.ucla.edu/stat/sas/webbooks/reg/default.htm

Helsel, D.R. and Hirsch R.M., <u>Statistical Methods in Water Resources</u>, Elsevier, Amsterdam, 1992.

Kleinbaum, D.G. and Kupper, L.L., <u>Applied Regression Analysis and Other Multivariate</u> <u>Methods</u>, Duxbury Press, Boston, Massachusetts, 1978.

Kleinbaum, D.G., Kupper, L.L., and Muller, K.E., <u>Applied Regression Analysis and Other</u> <u>Multivariate Methods</u>, Second Edition. PWS-Kent Publishing Company, Boston, Massachusetts, 1988.

SAS Institute Inc., <u>SAS/STAT[®] User's Guide</u>, <u>Version 8</u>, Cary, NC: SAS Institute Inc., 1999. (Chapter 55, The REG Procedure)

SAS Institute Inc., <u>SAS[®] System for Regression, Second Edition</u>, Cary, NC: SAS Institute Inc., 1991. 210pp.

Contact:

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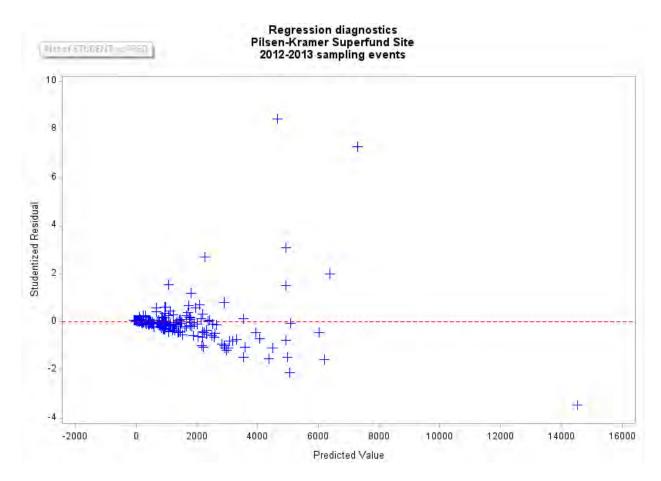


Figure 1: Residual plot from the SAS software for the Lead XRF and Laboratory values

Tests for Normality								
Test	St	atistic	p Va	lue				
Shapiro-Wilk	w	0.537364	Pr < W	<0.0001				
Kolmogorov-Smirnov	D	0.2823	Pr > D	<0.0100				
Cramer-von Mises	W-Sq	4.674063	Pr > W-Sq	<0.0050				
Anderson-Darling	A-Sq	23.65082	Pr > A-Sq	<0.0050				

Figure 2: Tests of Normality from the SAS software for residuals from the Lead XRF and Laboratory values

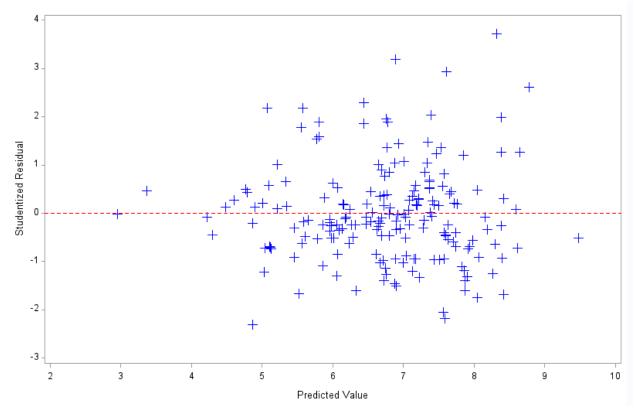


Figure 3: Residual plot from the SAS software for the natural log of Lead XRF and Laboratory values

Tests for Normality									
Test	St	atistic	p Val	ue					
Shapiro-Wilk	w	0.965805	Pr < W	0.0001					
Kolmogorov-Smirnov	D	0.0841	Pr > D	<0.0100					
Cramer-von Mises	W-Sq	0.32038	Pr > W-Sq	<0.0050					
Anderson-Darling	A-Sq	1.860632	Pr > A-Sq	<0.0050					

Figure 4: Tests of Normality from the SAS software for residuals from the natural log of Lead XRF and Laboratory values

Regression of the Natural Log of Lead Lab and XRF values Regression diagnostics Pilsen-Kramer Superfund Site 2012-2013 sampling events

The REG Procedure Model: MODEL1 Dependent Variable: LN_lab Natural Log of Lab Lead (ppm)

Number of Observations Read	180
Number of Observations Used	180

Analysis of Variance										
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F					
Model	1	188.90748	188.90748	2447.94	<.0001					
Error	178	13.73625	0.07717							
Corrected Total	179	202.64373								

Root MSE		0.27779	R-Square	0.9322	
Depende	ent Mean	6.68640	Adj R-Sq	0.9318	
Coeff Va	ır	4.15462			

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > [t]
Intercept	Intercept	1	0.37986	0.12914	2.94	0.0037
LN_XRF	Natural Log of XRF Lead (ppm)	1	0.99751	0.02016	49.48	<.0001

Figure 5: Simple linear regression output from the SAS software for the natural log of the Lead XRF and Laboratory values

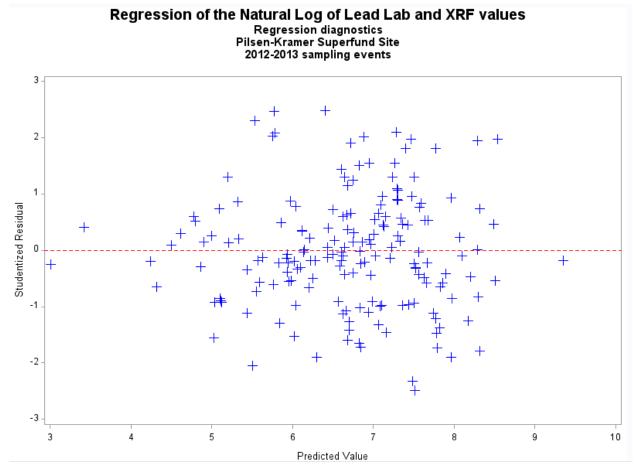
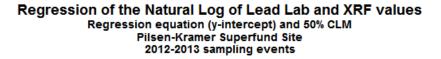


Figure 6: Residual plot from the SAS software for the natural log of Lead XRF and Laboratory values

Tests for Normality						
Test	St	atistic	p Value			
Shapiro-Wilk	w	0.990763	Pr < W	0.3000		
Kolmogorov-Smirnov	D	0.036768	Pr > D	>0.1500		
Cramer-von Mises	W-Sq	0.061628	Pr > W-Sq	>0.2500		
Anderson-Darling	A-Sq	0.439031	Pr > A-Sq	>0.2500		

Figure 7: Tests of Normality from the SAS software for residuals from the natural log of Lead XRF and Laboratory values



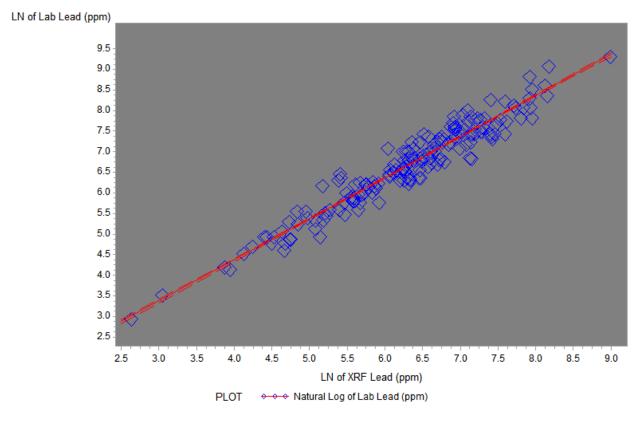


Figure 8: Best-fit linear regression line from the SAS software for the natural log of the Lead XRF and Laboratory values





24 February 2014

Pilsen-Kramer Superfund Site Comparisons of Cadmium, Copper, Lead, Tin, and Zinc levels

USEPA FIELDS Group

John Canar, Environmental Scientist Linda Jacobson, Research Associate Chuck Roth, Life Scientist

Introduction

Soil samples were collected by the USEPA and its contractor, Weston Solutions, near the H. Kramer property as well as at locations up to a mile and a half away from the property. These samples were analyzed for metals in an accredited laboratory. Additionally, split samples were performed on these samples in order to evaluate Lead levels for sieved samples (<250um). The metals focused on for this study were Cadmium, Copper, Lead, Tin, and Zinc because these metals are more indicative of the metals found on the H. Kramer site. The purpose of this analysis was to compare the Cadmium, Copper, Lead, Tin, and Zinc results in the Railroad/Alley area near the H. Kramer site, to the local reference area such as Little Italy, and to the USGS – Chicago Department of Environment surface metals sampling data (Kay et al., 2003). The USGS – Chicago Department of Environment samples were sieved (<180um).

Methods

The USEPA-Weston samples were taken at discrete locations in intervals of six inches to a foot below ground surface (bgs) to a maximum depth ranging from 6 to 48 inches bgs. The samples from the 0-6 inches bgs interval were used in this analysis. Samples were taken in front and back yards, alleys, and in soil areas with railroad tracks. The samples taken in gardens and drip zones were not used in this analysis due to garden soil being amended, mixed and often imported and drip zones being likely to contain Lead from Lead-based paint. The samples were separated into two areas called Railroad/Alley and Little Italy (see Figure 1). Little Italy is considered the local reference area. Little Italy was selected as it was mostly crosswind/upwind from the H. Kramer smelter and, compared to the Pilsen-Kramer area, had a more limited industrial past and

was similar in terms of age. Figure 2 is a representation of the historic wind rose for the Pilsen-Kramer area and environs. Note that "arms" in the figure represent the direction from which the wind blows; the lengths represent the proportion of the time the wind came from each direction (i.e., the frequency). Hence, for this wind rose, the predominant winds are from the west and the south.

The Railroad/Ally and Little Italy areas were compared for Cadmium, Copper, Lead, sieved Lead, Tin, and Zinc. Additionally, the same metals from the USGS – Chicago Department of Environment (USGS) sampling event were also compared. This comparison was phrased in the form of a question: Is there a difference in metal levels in the Railroad/Alley area compared to background data in the Little Italy area and for levels found in the Chicago area? If metal levels in the Railroad/Alley were higher than those in Little Italy or the Chicago area (the USGS – Chicago Department of Environment data), then this would indicate contamination. In order to answer this question, a statistical procedure called ANOVA (analysis of variance) is performed to test the hypothesis that the metal levels in each area are the same. Hence, one is testing whether Zinc levels, for instance, are the same for the Railroad/Alley data, the Little Italy data, and the Chicago area data. If that hypothesis is rejected, meaning that the levels of Zinc are not the same in these areas, then a multiple comparison procedure is performed. Since an ANOVA does not tell you which areas are different from each other, a multiple comparison procedure is gerformed. Since an ANOVA does not tell you which areas are different from each other, a multiple comparison procedure is performed. Since an ANOVA does not tell you which areas are different from each other, a multiple comparison procedure is performed.

Since the data were not normally distributed for any of the metals (shown by the Shapiro-Wilk test; results not shown), and therefore violated the assumption of normality, the data were ranked to perform a nonparametric analysis. SAS[®] statistical software was used to compare the areas using one-way ANOVA on the ranked data with the general linear models (GLM) procedure. The Type III Sums of Squares result was used since the areas had an unbalanced number of samples. The Least Squares Means Tukey-Kramer Multiple Comparisons test was used to determine differences between the areas including the USGS dataset. The Least Squares Means Tukey-Kramer Multiple Comparisons test used sample sizes and is the most robust test for pairwise comparisons (SAS, 2011).

Results and Discussion

There was a significant difference between the three areas for Cadmium, Copper, Lead, sieved Lead, Tin, and Zinc (shown by one-way ANOVA on ranked data; results not shown). The results of the Least Squares Means Tukey-Kramer Multiple Comparisons test are shown in Table 1. Boxplots of the Cadmium, Copper, Lead, sieved Lead, Tin, and Zinc data for each area are shown in Figures 3, 5, 7, 9, 11 and 13. Boxplots of the ranks of these metals are shown in Figure 4, 6, 8, 10, 12, and 14. (The boxplots of the ranks better display comparisons by area as the Railroad/Alley metal values have a tendency to obscure the differences due to the very high

metal concentrations.)

From Table 1, one can see that Copper, Lead, sieved Lead, and Zinc levels in the following areas were statistically different from each other: Little Italy & Railroad/Alley and Railroad/Alley & USGS. Specifically, Little Italy and the USGS dataset had lower levels of Copper, Lead, sieved Lead, and Zinc than those in the Railroad/Alley. Little Italy, the local reference area, was significantly lower than the other areas since it was farthest away from H. Kramer and was expected to not have been impacted by the power plant. This supports our expectation that Little Italy was not impacted by H. Kramer.

Little Italy and the USGS dataset did not have significantly different levels of Copper, Lead, sieved Lead, and Zinc. For Cadmium and Tin, Little Italy and Railroad/Alley were statistically different than the USGS dataset with the latter having lower metal levels. However, there were extremely high proportions of non-detects for these two metals (70% and 94%, respectively) in the USGS – Chicago Department of Environment dataset. Although the full detection limit was used for these non-detects, these values were extremely low, 2ppm and 50ppm, respectively. This likely led to a statistical difference for Tin that otherwise would not have been.

A cumulative representation of these statistical differences is shown in Figure 15. The colored ovals represent areas with metal values that are not statistically different from each other (as measured by the Tukey-Kramer multiple comparisons test). For example, the levels of Zinc are not significantly different for LI and USGS. (Where LI is Little Italy and USGS is the USGS dataset.) In contrast, LI and USGS have significantly lower Zinc levels than RR (Railroad/Alley). This pattern is repeated for Copper, Lead, and sieved Lead. These results also demonstrate that there were no statistical differences whether one evaluated the unsieved Lead results or the sieved Lead results. For Cadmium and Tin, the USGS dataset has lower metal levels than LI and RR. In general the figure demonstrates, when viewing from left to right, that the USGS dataset and Little Italy often have significantly lower metal levels than the RR areas. This is especially pronounced for three of the five metals: Copper, Lead, sieved Lead, and Zinc. As stated above, the significant proportion of non-detect values with very low detection limits in the USGS dataset likely led to the statistical differences with the LI and RR data for Tin.

References

Kay, R.T., Arnold, T.L., Cannon, W.F., Graham, D., Morton, E., and Biernet, R. "Concentrations of Polynuclear Aromatic Hydrocarbons and Inorganic Constituents in Ambient Surface Soils, Chicago, Illinois: 2001-2002". United States Geological Survey and the Chicago Department of Environment. Water-Resources Investigations Report 03-4105. Urbana, Illinois. 2003.

SAS Institute Inc., <u>SAS/STAT[®] User's Guide</u>, Version 9.2, Cary, NC: SAS Institute Inc., 2011.

(The GLM Procedure, Multiple Comparisons)

Contact

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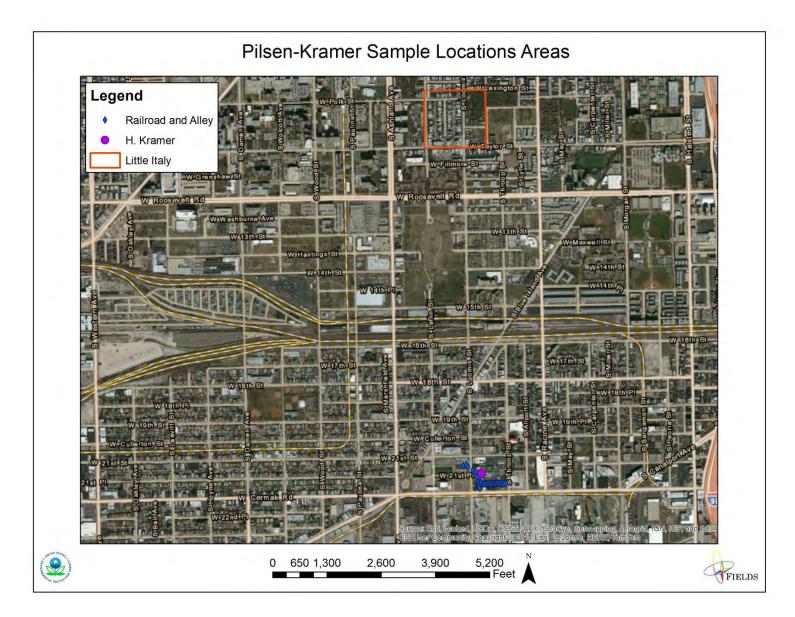


Figure 1: USEPA Sample locations and area

CHICAGO/MIDWAY 86-year summary: 1928 - 2013

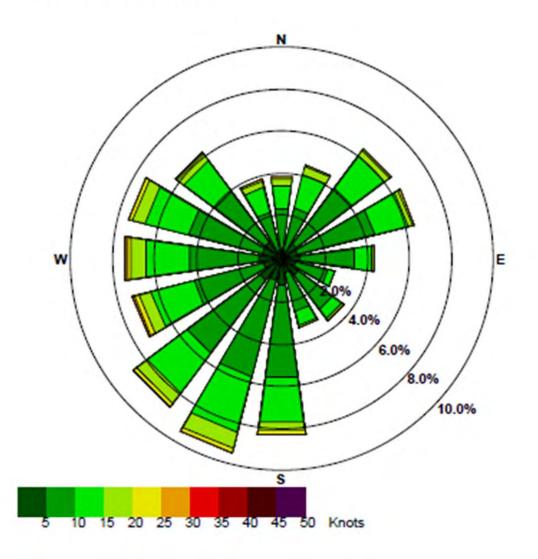
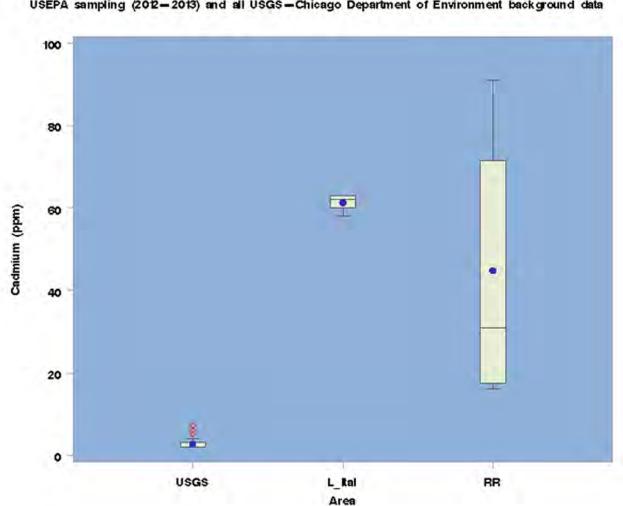


Figure 2: Windrose for the Pilsen-Kramer area and environs. Note that "arms" in the figure represent the direction from which the wind blows; the lengths represent the proportion of the time the wind came from each direction (i.e., the frequency). Hence, for this wind rose, the predominant winds are from the west and the south.

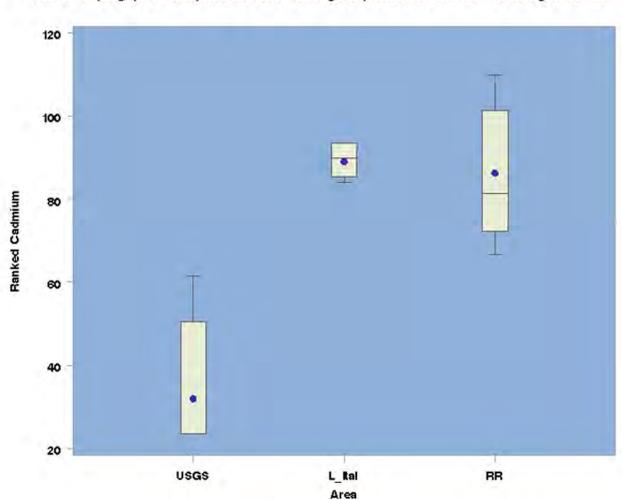
	Significant Difference (p-value < 0.05)					
Areas	Cadmium	Copper	Lead	Lead (250um)	Tin	Zinc
Little Italy & Railroad/Alley	Yes	Yes	Yes	Yes	Yes	Yes
Little Italy & USGS	Yes	No	No	No	Yes	No
Railroad/Alley & USGS	Yes	Yes	Yes	Yes	Yes	Yes

 Table 1: Least Squares Means Tukey-Kramer Multiple Comparisons test significant differences results.



Boxplots of Cadmium Values by Area Pilsen-Kramer Superfund Site USEPA sampling (2012-2013) and all USGS-Chicago Department of Environment background data

Figure 3: Boxplots of Cadmium for each area (red diamonds are extreme values, blue circle is the mean, and middle horizontal line is the median). Note: about 70% of the USGS—City of Chicago Cadmium values were at or below the limit of detection, 2ppm.



Boxplots of Ranked Cadmium Values by Area Pilsen-Kramer Superfund Site USEPA sampling (2012-2013) and all USGS-Chicago Department of Environment background data

Figure 4: Boxplots of ranked Cadmium levels for each area (red diamonds are extreme values, blue circle is the mean rank, and middle horizontal line is the median rank).

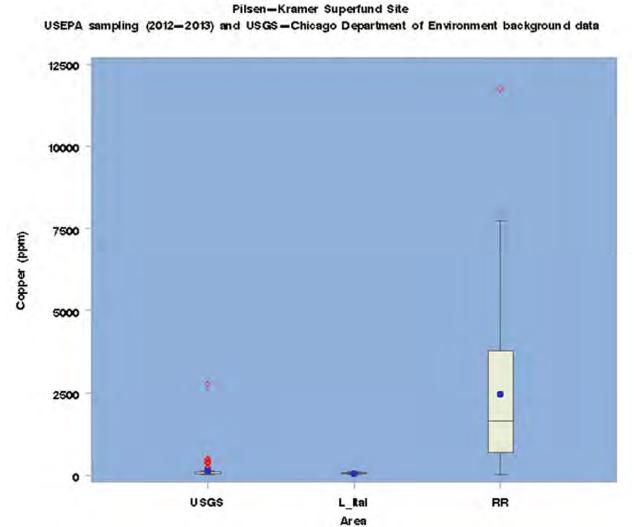
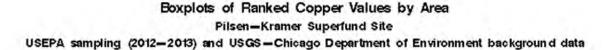


Figure 5: Boxplots of Copper for each area (red diamonds are extreme values, blue circle is the mean, and middle horizontal line is the median).

Boxplots of Copper Values by Area



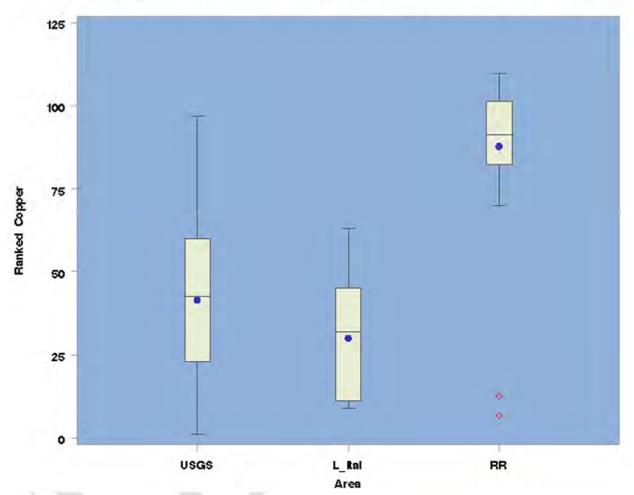


Figure 6: Boxplots of ranked Copper levels for each area (red diamonds are extreme values, blue circle is the mean rank, and middle horizontal line is the median rank).

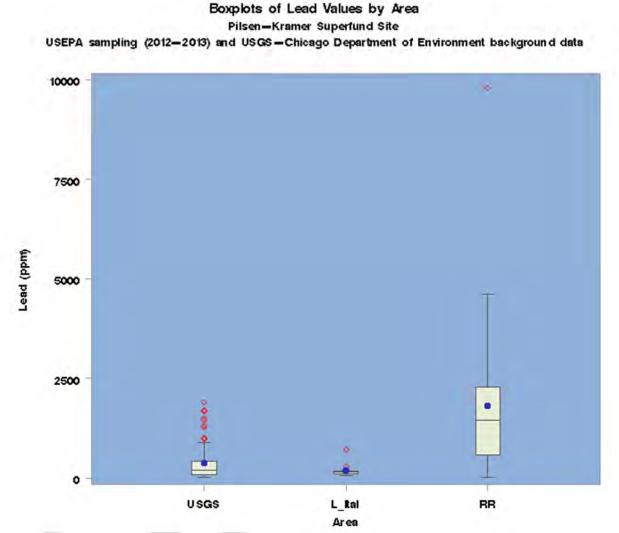
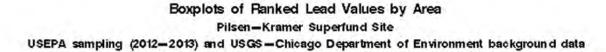


Figure 7: Boxplots of Lead for each area (red diamonds are extreme values, blue circle is the mean, and middle horizontal line is the median).



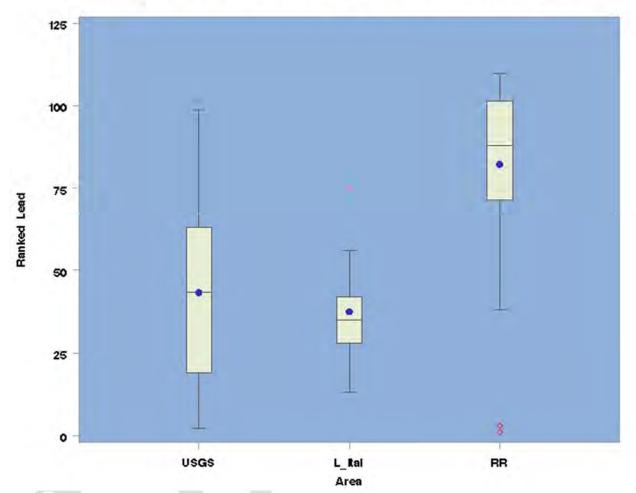


Figure 8: Boxplots of ranked Lead levels for each area (red diamonds are extreme values, blue circle is the mean rank, and middle horizontal line is the median rank).

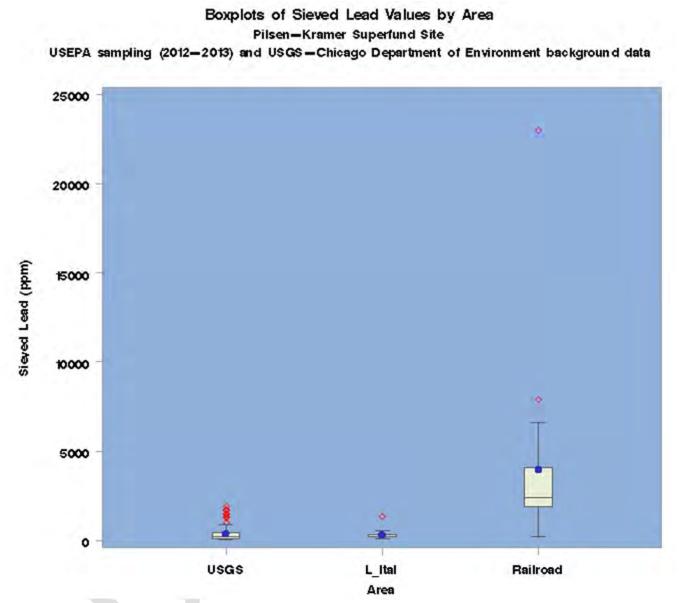
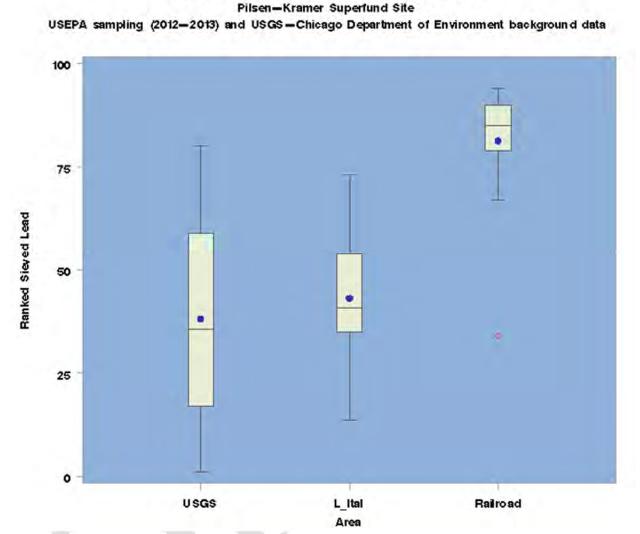


Figure 9: Boxplots of sieved Lead for each area (red diamonds are extreme values, blue circle is the mean, and middle horizontal line is the median).



Boxplots of Ranked Sieved Lead Values by Area

Figure 10: Boxplots of ranked sieved Lead levels for each area (red diamonds are extreme values, blue circle is the mean rank, and middle horizontal line is the median rank).

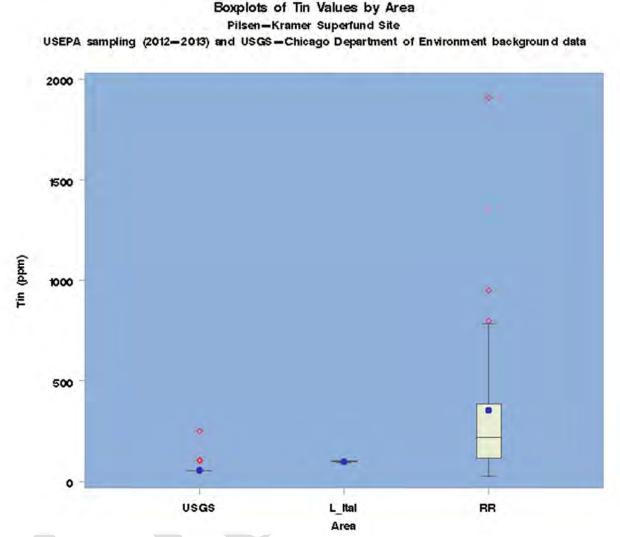


Figure 11: Boxplots of Tin for each area (red diamonds are extreme values, blue circle is the mean, and middle horizontal line is the median). Note: about 94% of the USGS—City of Chicago Tin values were at or below the limit of detection, 50ppm.

Boxplots of Ranked Tin Values by Area Pilsen—Kramer Superfund Site USEPA sampling (2012—2013) and USGS—Chicago Department of Environment background data

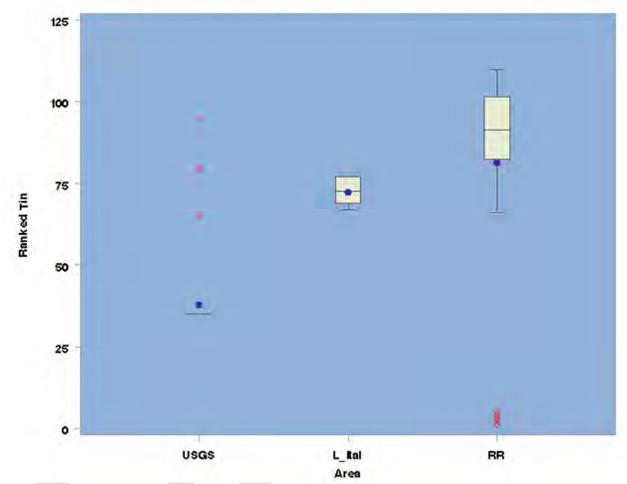
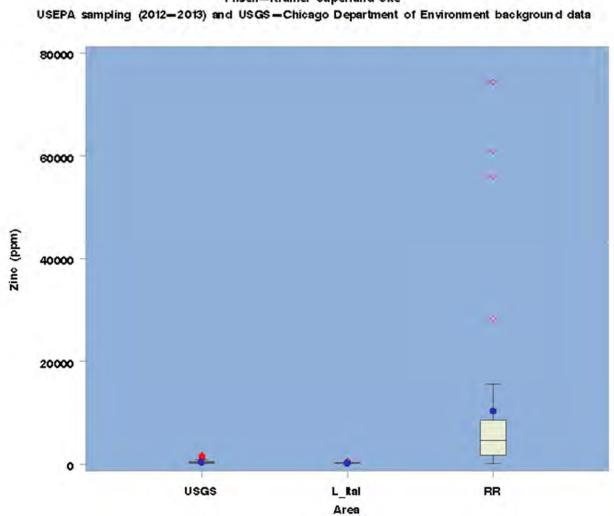
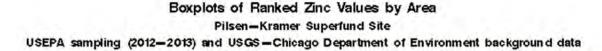


Figure 12: Boxplots of ranked Tin levels for each area (red diamonds are extreme values, blue circle is the mean rank, and middle horizontal line is the median rank). Note: about 94% of the USGS—City of Chicago Tin values were at or below the limit of detection, 50ppm.



Boxplots of Zinc Values by Area Pilsen-Kramer Superfund Site USEPA sampling (2012-2013) and USGS-Chicago Department of Environment background data

Figure 13: Boxplots of Zinc for each area (red diamonds are extreme values, blue circle is the mean, and middle horizontal line is the median).



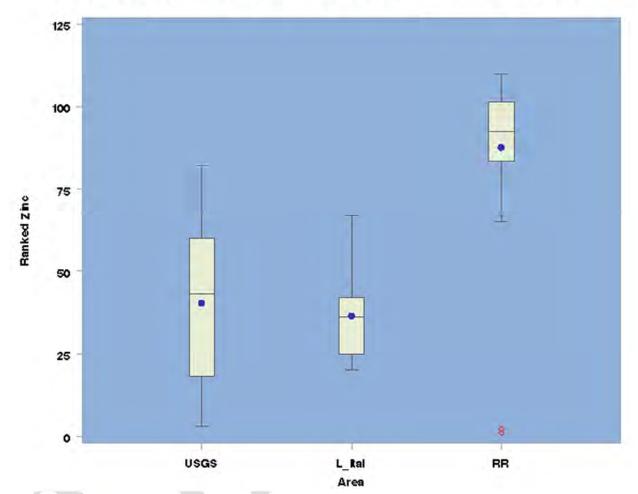


Figure 14: Boxplots of ranked Zinc levels for each area (red diamonds are extreme values, blue circle is the mean rank, and middle horizontal line is the median rank).

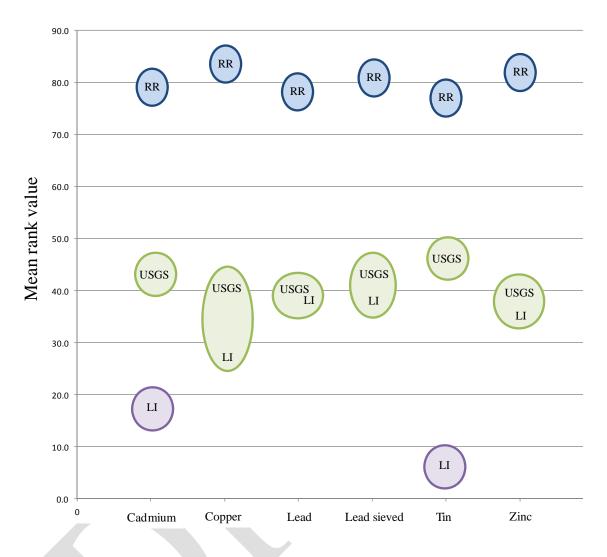


Figure 15: Cumulative schematic of the multiple comparisons by area and metal. Where LI is Little Italy, RR is Railroad/Alley, and USGS is the USGS – Chicago Department of Environment dataset. Where the Y-axis is the "lsmeans" value for each metal and dataset and is essentially the mean of the ranks. Areas in the same colored ovals are not statistically different from each other; areas in different colored ovals are statistically different from each other.